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Full Title:	zUMIs - A fast and flexible pipeline to process RNA sequencing data with UMIs	
Article Type:	Technical Note	
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Abstract:	<p>Single cell RNA-seq (scRNA-seq) experiments typically analyze hundreds or thousands of cells after amplification of the cDNA. The high throughput is made possible by the early introduction of sample-specific barcodes (BCs) and the amplification bias is alleviated by unique molecular identifiers (UMIs). Thus the ideal analysis pipeline for scRNA-seq data needs to efficiently tabulate reads according to both BC and UMI.</p> <p>zUMIs is such a pipeline, it can handle both known and random BCs and also efficiently collapses UMIs, either just for exon mapping reads or for both exon and intron mapping reads. Another unique feature of zUMIs is the adaptive downsampling function, that facilitates dealing with hugely varying library sizes, but also allows to evaluate whether the library has been sequenced to saturation. zUMIs flexibility allows to accommodate data generated with any of the major scRNA-seq protocols that use BCs and UMIs. To illustrate the utility of zUMIs, we analysed a single-nucleus RNA-seq dataset and show that more than 35% of all reads map to introns. We furthermore show that these intronic reads are informative about expression levels, significantly increasing the number of detected genes and improving the cluster resolution.</p>	
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Response to Reviewers:	<p>In order to increase readability, we have included only the remaining questions of the reviewer</p> <p>***</p> <p>REVIEWER RESPONSE 2: Please clarify "all detected genes". Is this all genes detected in Exon or Exon+Intron? If including all detected genes, then why are there different numbers of genes in each quantile in Figure 4H (top panel)? By definition, a quantile bin should contain roughly equal numbers of observations, but this does not seem to be the case even if the</p>	

	<p>quantiles were defined on the Exon+Intron data (the larger quantile bins have more genes for Exon+Intron).</p> <p>***</p> <p>---</p> <p>Author response:</p> <p>We have amended the text to clarify this point as requested.</p> <p>"For a fair comparison, we include all detected genes, which is equivalent to the number of genes detected with Exon+Intron counting and since we call a gene detected as soon as one count is associated, Exon counting is necessarily a subset of Exon+Intron."</p> <p>---</p> <p>***</p> <p>REVIEWER RESPONSE 2:</p> <p>Thanks for the clarification regarding enrichment of marker genes as opposed to simply detecting more genes in general. I appreciate the explanation given by the paragraph in the authors' response beginning with "Concerning the additionally detected marker genes:...". It would be transparent to include this explanation in the manuscript, since as it reads currently, it seems to imply an enrichment for marker genes when including introns.</p> <p>***</p> <p>---</p> <p>Author response:</p> <p>We agree with making the explanation as transparent as possible and have amended the text in this regard.</p> <p>"Here, we cross-reference the gene list with marker genes for transcriptomic subtypes detected for major cell types of the mouse brain and find that ~5% of the additional genes are also marker genes, which corresponds well to the general frequency of marker genes among the detected genes (4%). In the same vein, we also detect proportionally more DE genes with Exon+Intron counting as compared to Exon counting. Thus including introns simply allows us to better detect present transcripts, while it leaves the proportions of interest unaltered."</p> <p>---</p>
Additional Information:	
Question	Response
Are you submitting this manuscript to a special series or article collection?	No
Experimental design and statistics	Yes
Full details of the experimental design and statistical methods used should be given in the Methods section, as detailed in our Minimum Standards Reporting Checklist . Information essential to interpreting the data presented should be made available in the figure legends.	
Have you included all the information requested in your manuscript?	
Resources	Yes
A description of all resources used, including antibodies, cell lines, animals and software tools, with enough	

<p>information to allow them to be uniquely identified, should be included in the Methods section. Authors are strongly encouraged to cite Research Resource Identifiers (RRIDs) for antibodies, model organisms and tools, where possible.</p> <p>Have you included the information requested as detailed in our Minimum Standards Reporting Checklist?</p>	
<p>Availability of data and materials</p> <p>All datasets and code on which the conclusions of the paper rely must be either included in your submission or deposited in publicly available repositories (where available and ethically appropriate), referencing such data using a unique identifier in the references and in the “Availability of Data and Materials” section of your manuscript.</p> <p>Have you have met the above requirement as detailed in our Minimum Standards Reporting Checklist?</p>	<p>Yes</p>

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4 This is pdfTeX, Version 3.14159265-2.6-1.40.16 (TeX Live 2015/W32TeX)  
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31 ) (c:/TeXLive/2015/texmf-dist/tex/latex/base/inputenc.sty  
32 Package: inputenc 2015/03/17 v1.2c Input encoding file  
33 \inpenc@prehook=\toks14  
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52 defining Unicode char U+201E (decimal 8222)
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54 defining Unicode char U+2031 (decimal 8241)
55 defining Unicode char U+2039 (decimal 8249)
56 defining Unicode char U+203A (decimal 8250)
57 defining Unicode char U+2423 (decimal 9251)
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4    )
5    Now handling font encoding OT1 ...
6    ... processing UTF-8 mapping file for font encoding OT1
7    (c:/TeXLive/2015/texmf-dist/tex/latex/base/ot1enc.dfu
8    File: ot1enc.dfu 2016/02/28 v1.1s UTF-8 support for inputenc
9        defining Unicode char U+00A0 (decimal 160)
10       defining Unicode char U+00A1 (decimal 161)
11       defining Unicode char U+00A3 (decimal 163)
12       defining Unicode char U+00AD (decimal 173)
13       defining Unicode char U+00B8 (decimal 184)
14       defining Unicode char U+00BF (decimal 191)
15       defining Unicode char U+00C5 (decimal 197)
16       defining Unicode char U+00C6 (decimal 198)
17       defining Unicode char U+00D8 (decimal 216)
18       defining Unicode char U+00DF (decimal 223)
19       defining Unicode char U+00E6 (decimal 230)
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44   )
45   Now handling font encoding OMS ...
46   ... processing UTF-8 mapping file for font encoding OMS
47   (c:/TeXLive/2015/texmf-dist/tex/latex/base/omsenc.dfu
48   File: omsenc.dfu 2016/02/28 v1.1s UTF-8 support for inputenc
49       defining Unicode char U+00A7 (decimal 167)
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51       defining Unicode char U+00B7 (decimal 183)
52       defining Unicode char U+2020 (decimal 8224)
53       defining Unicode char U+2021 (decimal 8225)
54       defining Unicode char U+2022 (decimal 8226)
55   )
56   Now handling font encoding OMX ...
57   ... no UTF-8 mapping file for font encoding OMX
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4     Now handling font encoding U ...
5     ... no UTF-8 mapping file for font encoding U
6         defining Unicode char U+00A9 (decimal 169)
7         defining Unicode char U+00AA (decimal 170)
8         defining Unicode char U+00AE (decimal 174)
9         defining Unicode char U+00BA (decimal 186)
10        defining Unicode char U+02C6 (decimal 710)
11        defining Unicode char U+02DC (decimal 732)
12        defining Unicode char U+200C (decimal 8204)
13        defining Unicode char U+2026 (decimal 8230)
14        defining Unicode char U+2122 (decimal 8482)
15        defining Unicode char U+2423 (decimal 9251)
16    )) (c:/TeXLive/2015/texmf-dist/tex/latex/base/fontenc.sty
17 Package: fontenc 2005/09/27 v1.99g Standard LaTeX package
18 (c:/TeXLive/2015/texmf-dist/tex/latex/base/tlenc.def
19 File: tlenc.def 2005/09/27 v1.99g Standard LaTeX file
20 LaTeX Font Info: Redeclaring font encoding T1 on input line 48.
21 )) (c:/TeXLive/2015/texmf-dist/tex/generic/oberdiek/ifpdf.sty
22 Package: ifpdf 2011/01/30 v2.3 Provides the ifpdf switch (HO)
23 Package ifpdf Info: pdfTeX in PDF mode is detected.
24 ) (c:/TeXLive/2015/texmf-dist/tex/latex/microtype/microtype.sty
25 Package: microtype 2013/05/23 v2.5a Micro-typographical refinements (RS)
26 (c:/TeXLive/2015/texmf-dist/tex/latex/graphics/keyval.sty
27 Package: keyval 2014/10/28 v1.15 key=value parser (DPC)
28 \KV@toks@=\toks16
29 )
30 )
31 \MT@toks=\toks17
32 \MT@count=\count87
33 LaTeX Info: Redefining \textls on input line 766.
34 \MT@outer@kern=\dimen103
35 LaTeX Info: Redefining \textmicrotypecontext on input line 1285.
36 \MT@listname@count=\count88
37 (c:/TeXLive/2015/texmf-dist/tex/latex/microtype/microtype-pdftex.def
38 File: microtype-pdftex.def 2013/05/23 v2.5a Definitions specific to
39 pdftex (RS)
40
41 LaTeX Info: Redefining \lsstyle on input line 915.
42 LaTeX Info: Redefining \lslig on input line 915.
43 \MT@outer@space=\skip43
44 )
45 Package microtype Info: Loading configuration file microtype.cfg.
46 (c:/TeXLive/2015/texmf-dist/tex/latex/microtype/microtype.cfg
47 File: microtype.cfg 2013/05/23 v2.5a microtype main configuration file
48 (RS)
49 )) (c:/TeXLive/2015/texmf-dist/tex/latex/euler/euler.sty
50 Package: euler 1995/03/05 v2.5
51 Package: `euler' v2.5 <1995/03/05> (FJ and FMi)
52 LaTeX Font Info: Redeclaring symbol font `letters' on input line 35.
53 LaTeX Font Info: Encoding `OML' has changed to `U' for symbol font
54 (Font)           `letters' in the math version `normal' on input line
55 35.
56 LaTeX Font Info: Overwriting symbol font `letters' in version `normal'
57 (Font)           OML/cmm/m/it --> U/eur/m/n on input line 35.
58 LaTeX Font Info: Encoding `OML' has changed to `U' for symbol font
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4 (Font) `letters' in the math version `bold' on input line
5 35.
6 LaTeX Font Info: Overwriting symbol font `letters' in version `bold'
7 OML/cmm/b/it --> U/eur/m/n on input line 35.
8 LaTeX Font Info: Overwriting symbol font `letters' in version `bold'
9 U/eur/m/n --> U/eur/b/n on input line 36.
10 LaTeX Font Info: Redeclaring math symbol \Gamma on input line 47.
11 LaTeX Font Info: Redeclaring math symbol \Delta on input line 48.
12 LaTeX Font Info: Redeclaring math symbol \Theta on input line 49.
13 LaTeX Font Info: Redeclaring math symbol \Lambda on input line 50.
14 LaTeX Font Info: Redeclaring math symbol \Xi on input line 51.
15 LaTeX Font Info: Redeclaring math symbol \Pi on input line 52.
16 LaTeX Font Info: Redeclaring math symbol \Sigma on input line 53.
17 LaTeX Font Info: Redeclaring math symbol \Upsilon on input line 54.
18 LaTeX Font Info: Redeclaring math symbol \Phi on input line 55.
19 LaTeX Font Info: Redeclaring math symbol \Psi on input line 56.
20 LaTeX Font Info: Redeclaring math symbol \Omega on input line 57.
21 LaTeX Font Info: Redeclaring math symbol \mathgroup4
22 \symEulerFraktur=\mathgroup4
23 LaTeX Font Info: Overwriting symbol font `EulerFraktur' in version
24 `bold'
25 (Font) U/euf/m/n --> U/euf/b/n on input line 63.
26 LaTeX Info: Redefining \oldstylenums on input line 85.
27 \symEulerScript=\mathgroup5
28 LaTeX Font Info: Overwriting symbol font `EulerScript' in version
29 `bold'
30 (Font) U/eus/m/n --> U/eus/b/n on input line 93.
31 LaTeX Font Info: Redeclaring math symbol \aleph on input line 97.
32 LaTeX Font Info: Redeclaring math symbol \Re on input line 98.
33 LaTeX Font Info: Redeclaring math symbol \Im on input line 99.
34 LaTeX Font Info: Redeclaring math delimiter \vert on input line 101.
35 LaTeX Font Info: Redeclaring math delimiter \backslash on input line
36 103.
37 LaTeX Font Info: Redeclaring math symbol \neg on input line 106.
38 LaTeX Font Info: Redeclaring math symbol \wedge on input line 108.
39 LaTeX Font Info: Redeclaring math symbol \vee on input line 110.
40 LaTeX Font Info: Redeclaring math symbol \setminus on input line 112.
41 LaTeX Font Info: Redeclaring math symbol \sim on input line 113.
42 LaTeX Font Info: Redeclaring math symbol \mid on input line 114.
43 LaTeX Font Info: Redeclaring math delimiter \arrowvert on input line
44 116.
45 LaTeX Font Info: Redeclaring math symbol \mathsection on input line
46 117.
47 \symEulerExtension=\mathgroup6
48 LaTeX Font Info: Redeclaring math symbol \coprod on input line 125.
49 LaTeX Font Info: Redeclaring math symbol \prod on input line 125.
50 LaTeX Font Info: Redeclaring math symbol \sum on input line 125.
51 LaTeX Font Info: Redeclaring math symbol \intop on input line 130.
52 LaTeX Font Info: Redeclaring math symbol \ointop on input line 131.
53 LaTeX Font Info: Redeclaring math symbol \braceld on input line 132.
54 LaTeX Font Info: Redeclaring math symbol \bracerd on input line 133.
55 LaTeX Font Info: Redeclaring math symbol \bracelu on input line 134.
56 LaTeX Font Info: Redeclaring math symbol \braceru on input line 135.
57 LaTeX Font Info: Redeclaring math symbol \infty on input line 136.
58 LaTeX Font Info: Redeclaring math symbol \nearrow on input line 153.
59
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4 LaTeX Font Info: Redeclaring math symbol \searrow on input line 154.
5 LaTeX Font Info: Redeclaring math symbol \nwarrow on input line 155.
6 LaTeX Font Info: Redeclaring math symbol \swarrow on input line 156.
7 LaTeX Font Info: Redeclaring math symbol \Leftrightarrow on input line
8 157.
9 LaTeX Font Info: Redeclaring math symbol \Leftarrow on input line 158.
10 LaTeX Font Info: Redeclaring math symbol \Rightarrow on input line
11 159.
12 LaTeX Font Info: Redeclaring math symbol \leftrightarrow on input line
13 160.
14 LaTeX Font Info: Redeclaring math symbol \leftarrow on input line 161.
15 LaTeX Font Info: Redeclaring math symbol \rightarrow on input line
16 163.
17 LaTeX Font Info: Redeclaring math delimiter \uparrow on input line
18 166.
19 LaTeX Font Info: Redeclaring math delimiter \downarrow on input line
20 168.
21 LaTeX Font Info: Redeclaring math delimiter \updownarrow on input line
22 170.
23 LaTeX Font Info: Redeclaring math delimiter \Uparrow on input line
24 172.
25 LaTeX Font Info: Redeclaring math delimiter \Downarrow on input line
26 174.
27 LaTeX Font Info: Redeclaring math delimiter \Updownarrow on input line
28 176.
29 LaTeX Font Info: Redeclaring math symbol \leftharpoonup on input line
30 177.
31 LaTeX Font Info: Redeclaring math symbol \leftharpoondown on input
32 line 178.
33
34
35 LaTeX Font Info: Redeclaring math symbol \rightharpoonup on input line
36 179.
37 LaTeX Font Info: Redeclaring math symbol \rightharpoondown on input
38 line 180
39
40 .
41 LaTeX Font Info: Redeclaring math delimiter \lbrace on input line 182.
42 LaTeX Font Info: Redeclaring math delimiter \rbrace on input line 184.
43 \symcmmigroup=\mathgroup7
44 LaTeX Font Info: Overwriting symbol font `cmmigroup' in version `bold'
45 (Font) OML/cmm/m/it --> OML/cmm/b/it on input line 200.
46 LaTeX Font Info: Redeclaring math accent \vec on input line 201.
47 LaTeX Font Info: Redeclaring math symbol \triangleleft on input line
48 202.
49 LaTeX Font Info: Redeclaring math symbol \triangleright on input line
50 203.
51 LaTeX Font Info: Redeclaring math symbol \star on input line 204.
52 LaTeX Font Info: Redeclaring math symbol \lhook on input line 205.
53 LaTeX Font Info: Redeclaring math symbol \rhook on input line 206.
54 LaTeX Font Info: Redeclaring math symbol \flat on input line 207.
55 LaTeX Font Info: Redeclaring math symbol \natural on input line 208.
56 LaTeX Font Info: Redeclaring math symbol \sharp on input line 209.
57 LaTeX Font Info: Redeclaring math symbol \smile on input line 210.
58 LaTeX Font Info: Redeclaring math symbol \frown on input line 211.
59 LaTeX Font Info: Redeclaring math accent \grave on input line 245.
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4  LaTeX Font Info: Redeclaring math accent \acute on input line 246.
5  LaTeX Font Info: Redeclaring math accent \tilde on input line 247.
6  LaTeX Font Info: Redeclaring math accent \ddot on input line 248.
7  LaTeX Font Info: Redeclaring math accent \check on input line 249.
8  LaTeX Font Info: Redeclaring math accent \breve on input line 250.
9  LaTeX Font Info: Redeclaring math accent \bar on input line 251.
10 LaTeX Font Info: Redeclaring math accent \dot on input line 252.
11 LaTeX Font Info: Redeclaring math accent \hat on input line 254.
12 ) (c:/TeXLive/2015/texmf-dist/tex/latex/merriweather/merriweather.sty
13 Package: merriweather 2014/01/22 (Bob Tennent) Supports
14 Merriweather(Sans) font
15 s for all LaTeX engines.
16 (c:/TeXLive/2015/texmf-dist/tex/generic/ifxetex/ifxetex.sty
17 Package: ifxetex 2010/09/12 v0.6 Provides ifxetex conditional
18 ) (c:/TeXLive/2015/texmf-dist/tex/generic/oberdiek/ifluatex.sty
19 Package: ifluatex 2010/03/01 v1.3 Provides the ifluatex switch (HO)
20 Package ifluatex Info: LuaTeX not detected.
21 ) (c:/TeXLive/2015/texmf-dist/tex/latex/base/textcomp.sty
22 Package: textcomp 2005/09/27 v1.99g Standard LaTeX package
23 Package textcomp Info: Sub-encoding information:
24 (textcomp)      5 = only ISO-Adobe without \textcurrency
25 (textcomp)      4 = 5 + \texteuro
26 (textcomp)      3 = 4 + \textohm
27 (textcomp)      2 = 3 + \textestimated + \textcurrency
28 (textcomp)      1 = TS1 - \textcircled - \t
29 (textcomp)      0 = TS1 (full)
30
31 (textcomp)      Font families with sub-encoding setting implement
32 (textcomp)      only a restricted character set as indicated.
33 (textcomp)      Family '?' is the default used for unknown fonts.
34 (textcomp)      See the documentation for details.
35
36 Package textcomp Info: Setting ? sub-encoding to TS1/1 on input line 79.
37 (c:/TeXLive/2015/texmf-dist/tex/latex/base/tslenc.def
38 File: tslenc.def 2001/06/05 v3.0e (jk/car/fm) Standard LaTeX file
39 Now handling font encoding TS1 ...
40 ... processing UTF-8 mapping file for font encoding TS1
41 (c:/TeXLive/2015/texmf-dist/tex/latex/base/tslenc.dfu
42 File: tslenc.dfu 2016/02/28 v1.1s UTF-8 support for inputenc
43     defining Unicode char U+00A2 (decimal 162)
44     defining Unicode char U+00A3 (decimal 163)
45     defining Unicode char U+00A4 (decimal 164)
46     defining Unicode char U+00A5 (decimal 165)
47     defining Unicode char U+00A6 (decimal 166)
48     defining Unicode char U+00A7 (decimal 167)
49     defining Unicode char U+00A8 (decimal 168)
50     defining Unicode char U+00A9 (decimal 169)
51     defining Unicode char U+00AA (decimal 170)
52     defining Unicode char U+00AC (decimal 172)
53     defining Unicode char U+00AE (decimal 174)
54     defining Unicode char U+00AF (decimal 175)
55     defining Unicode char U+00B0 (decimal 176)
56     defining Unicode char U+00B1 (decimal 177)
57     defining Unicode char U+00B2 (decimal 178)
58     defining Unicode char U+00B3 (decimal 179)
59     defining Unicode char U+00B4 (decimal 180)
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```

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1
2
3
4      defining Unicode char U+00B5 (decimal 181)
5      defining Unicode char U+00B6 (decimal 182)
6      defining Unicode char U+00B7 (decimal 183)
7      defining Unicode char U+00B9 (decimal 185)
8      defining Unicode char U+00BA (decimal 186)
9      defining Unicode char U+00BC (decimal 188)
10     defining Unicode char U+00BD (decimal 189)
11     defining Unicode char U+00BE (decimal 190)
12     defining Unicode char U+00D7 (decimal 215)
13     defining Unicode char U+00F7 (decimal 247)
14     defining Unicode char U+0192 (decimal 402)
15     defining Unicode char U+02C7 (decimal 711)
16     defining Unicode char U+02D8 (decimal 728)
17     defining Unicode char U+02DD (decimal 733)
18     defining Unicode char U+0E3F (decimal 3647)
19     defining Unicode char U+2016 (decimal 8214)
20     defining Unicode char U+2020 (decimal 8224)
21     defining Unicode char U+2021 (decimal 8225)
22     defining Unicode char U+2022 (decimal 8226)
23     defining Unicode char U+2030 (decimal 8240)
24     defining Unicode char U+2031 (decimal 8241)
25     defining Unicode char U+203B (decimal 8251)
26     defining Unicode char U+203D (decimal 8253)
27     defining Unicode char U+2044 (decimal 8260)
28     defining Unicode char U+204E (decimal 8270)
29     defining Unicode char U+2052 (decimal 8274)
30     defining Unicode char U+20A1 (decimal 8353)
31     defining Unicode char U+20A4 (decimal 8356)
32     defining Unicode char U+20A6 (decimal 8358)
33     defining Unicode char U+20A9 (decimal 8361)
34     defining Unicode char U+20AB (decimal 8363)
35     defining Unicode char U+20AC (decimal 8364)
36     defining Unicode char U+20B1 (decimal 8369)
37     defining Unicode char U+2103 (decimal 8451)
38     defining Unicode char U+2116 (decimal 8470)
39     defining Unicode char U+2117 (decimal 8471)
40     defining Unicode char U+211E (decimal 8478)
41     defining Unicode char U+2120 (decimal 8480)
42     defining Unicode char U+2122 (decimal 8482)
43     defining Unicode char U+2126 (decimal 8486)
44     defining Unicode char U+2127 (decimal 8487)
45     defining Unicode char U+212E (decimal 8494)
46     defining Unicode char U+2190 (decimal 8592)
47     defining Unicode char U+2191 (decimal 8593)
48     defining Unicode char U+2192 (decimal 8594)
49     defining Unicode char U+2193 (decimal 8595)
50     defining Unicode char U+2329 (decimal 9001)
51     defining Unicode char U+232A (decimal 9002)
52     defining Unicode char U+2422 (decimal 9250)
53     defining Unicode char U+25E6 (decimal 9702)
54     defining Unicode char U+25EF (decimal 9711)
55     defining Unicode char U+266A (decimal 9834)
56
57   ))
58
59 
```

60 LaTeX Info: Redefining \oldstylenums on input line 334.

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```
1
2
3
4 Package textcomp Info: Setting cmr sub-encoding to TS1/0 on input line
5 349.
6 Package textcomp Info: Setting cmss sub-encoding to TS1/0 on input line
7 350.
8 Package textcomp Info: Setting cmtt sub-encoding to TS1/0 on input line
9 351.
10 Package textcomp Info: Setting cmvtt sub-encoding to TS1/0 on input line
11 352.
12 Package textcomp Info: Setting cmbr sub-encoding to TS1/0 on input line
13 353.
14 Package textcomp Info: Setting cmtl sub-encoding to TS1/0 on input line
15 354.
16 Package textcomp Info: Setting ccr sub-encoding to TS1/0 on input line
17 355.
18 Package textcomp Info: Setting ptm sub-encoding to TS1/4 on input line
19 356.
20 Package textcomp Info: Setting pcr sub-encoding to TS1/4 on input line
21 357.
22 Package textcomp Info: Setting phv sub-encoding to TS1/4 on input line
23 358.
24 Package textcomp Info: Setting ppl sub-encoding to TS1/3 on input line
25 359.
26 Package textcomp Info: Setting pag sub-encoding to TS1/4 on input line
27 360.
28 Package textcomp Info: Setting pbk sub-encoding to TS1/4 on input line
29 361.
30 Package textcomp Info: Setting pnc sub-encoding to TS1/4 on input line
31 362.
32 Package textcomp Info: Setting pzc sub-encoding to TS1/4 on input line
33 363.
34 Package textcomp Info: Setting bch sub-encoding to TS1/4 on input line
35 364.
36 Package textcomp Info: Setting put sub-encoding to TS1/5 on input line
37 365.
38 Package textcomp Info: Setting uag sub-encoding to TS1/5 on input line
39 366.
40 Package textcomp Info: Setting ugq sub-encoding to TS1/5 on input line
41 367.
42 Package textcomp Info: Setting ul8 sub-encoding to TS1/4 on input line
43 368.
44 Package textcomp Info: Setting ul9 sub-encoding to TS1/4 on input line
45 369.
46 Package textcomp Info: Setting augie sub-encoding to TS1/5 on input line
47 370.
48 Package textcomp Info: Setting dayrom sub-encoding to TS1/3 on input line
49 371.
50 Package textcomp Info: Setting dayroms sub-encoding to TS1/3 on input
51 line 372.
52
53 Package textcomp Info: Setting pxr sub-encoding to TS1/0 on input line
54 373.
55 Package textcomp Info: Setting pxss sub-encoding to TS1/0 on input line
56 374.
57
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1
2
3
4 Package textcomp Info: Setting pxtt sub-encoding to TS1/0 on input line
5 375.
6 Package textcomp Info: Setting txr sub-encoding to TS1/0 on input line
7 376.
8 Package textcomp Info: Setting txss sub-encoding to TS1/0 on input line
9 377.
10 Package textcomp Info: Setting txtt sub-encoding to TS1/0 on input line
11 378.
12 Package textcomp Info: Setting lmr sub-encoding to TS1/0 on input line
13 379.
14 Package textcomp Info: Setting lmdh sub-encoding to TS1/0 on input line
15 380.
16 Package textcomp Info: Setting lmss sub-encoding to TS1/0 on input line
17 381.
18 Package textcomp Info: Setting lmssq sub-encoding to TS1/0 on input line
19 382.
20 Package textcomp Info: Setting lmvtt sub-encoding to TS1/0 on input line
21 383.
22 Package textcomp Info: Setting lmtt sub-encoding to TS1/0 on input line
23 384.
24 Package textcomp Info: Setting qhv sub-encoding to TS1/0 on input line
25 385.
26 Package textcomp Info: Setting qag sub-encoding to TS1/0 on input line
27 386.
28 Package textcomp Info: Setting qbk sub-encoding to TS1/0 on input line
29 387.
30 Package textcomp Info: Setting qcr sub-encoding to TS1/0 on input line
31 388.
32 Package textcomp Info: Setting qcs sub-encoding to TS1/0 on input line
33 389.
34 Package textcomp Info: Setting qpl sub-encoding to TS1/0 on input line
35 390.
36 Package textcomp Info: Setting qtm sub-encoding to TS1/0 on input line
37 391.
38 Package textcomp Info: Setting qzc sub-encoding to TS1/0 on input line
39 392.
40 Package textcomp Info: Setting qhvc sub-encoding to TS1/0 on input line
41 393.
42 Package textcomp Info: Setting futs sub-encoding to TS1/4 on input line
43 394.
44 Package textcomp Info: Setting futx sub-encoding to TS1/4 on input line
45 395.
46 Package textcomp Info: Setting futj sub-encoding to TS1/4 on input line
47 396.
48 Package textcomp Info: Setting hlh sub-encoding to TS1/3 on input line
49 397.
50 Package textcomp Info: Setting hls sub-encoding to TS1/3 on input line
51 398.
52 Package textcomp Info: Setting hlst sub-encoding to TS1/3 on input line
53 399.
54 Package textcomp Info: Setting hlct sub-encoding to TS1/5 on input line
55 400.
56 Package textcomp Info: Setting hlx sub-encoding to TS1/5 on input line
57 401.
58
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2
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4 Package textcomp Info: Setting hlce sub-encoding to TS1/5 on input line
5 402.
6 Package textcomp Info: Setting hlcn sub-encoding to TS1/5 on input line
7 403.
8 Package textcomp Info: Setting hlcw sub-encoding to TS1/5 on input line
9 404.
10 Package textcomp Info: Setting hlcf sub-encoding to TS1/5 on input line
11 405.
12 Package textcomp Info: Setting pplx sub-encoding to TS1/3 on input line
13 406.
14 Package textcomp Info: Setting pplj sub-encoding to TS1/3 on input line
15 407.
16 Package textcomp Info: Setting ptmx sub-encoding to TS1/4 on input line
17 408.
18 Package textcomp Info: Setting ptmj sub-encoding to TS1/4 on input line
19 409.
20 ) (c:/TeXLive/2015/texmf-dist/tex/latex/xkeyval/xkeyval.sty
21 Package: xkeyval 2014/12/03 v2.7a package option processing (HA)
22 (c:/TeXLive/2015/texmf-dist/tex/generic/xkeyval/xkeyval.tex
23 (c:/TeXLive/2015/te
24 xmf-dist/tex/generic/xkeyval/xkvutils.tex
25 \XKV@toks=\toks18
26 \XKV@tempa@toks=\toks19
27 )
28 \XKV@depth=\count89
29 File: xkeyval.tex 2014/12/03 v2.7a key=value parser (HA)
30 )) (c:/TeXLive/2015/texmf-dist/tex/latex/base/fontenc.sty
31 Package: fontenc 2005/09/27 v1.99g Standard LaTeX package
32 ) (c:/TeXLive/2015/texmf-dist/tex/latex/fontaxes/fontaxes.sty
33 Package: fontaxes 2014/03/23 v1.0d Font selection axes
34 LaTeX Info: Redefining \upshape on input line 29.
35 LaTeX Info: Redefining \itshape on input line 31.
36 LaTeX Info: Redefining \slshape on input line 33.
37 LaTeX Info: Redefining \scshape on input line 37.
38 ) (c:/TeXLive/2015/texmf-dist/tex/latex/mweights/mweights.sty
39 Package: mweights 2013/07/21 (Bob Tennent) Support package for multiple-
40 weight
41 font packages.
42 LaTeX Info: Redefining \bfseries on input line 22.
43 LaTeX Info: Redefining \mdseries on input line 29.
44 LaTeX Info: Redefining \rmfamily on input line 36.
45 LaTeX Info: Redefining \sffamily on input line 53.
46 LaTeX Info: Redefining \ttfamily on input line 70.
47 ) (c:/TeXLive/2015/texmf-dist/tex/latex/mathastext/mathastext.sty
48 Package: mathastext 2016/04/02 v1.3m Use the text font in math mode (jfB)
49 \mst@exists@muskip=\muskip10
50 \mst@forall@muskip=\muskip11
51 \mst@prime@muskip=\muskip12
52 \mst@do@nonletters=\toks20
53 \mst@do@easynonletters=\toks21
54 \mst@do@az=\toks22
55 \mst@do@AZ=\toks23
56 \symmtoperatorfont=\mathgroup8
57 \symmtletterfont=\mathgroup9
58
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```

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1
2
3
4     LaTeX Font Info:    Overwriting math alphabet `\\mathnormalbold' in
5     version `nor
6     mal'
7     (Font)           T1/Merriweather-OsF/bx/it --> T1/Merriweather-
8     OsF/bx/it
9     on input line 1007.
10    LaTeX Font Info:    Overwriting math alphabet `\\mathnormalbold' in
11    version `bol
12    d'
13    (Font)           T1/Merriweather-OsF/bx/it --> T1/Merriweather-
14    OsF/bx/it
15    on input line 1007.
16    LaTeX Font Info:    Overwriting symbol font `mtletterfont' in version
17    `normal'
18    (Font)           T1/Merriweather-OsF/m/it --> T1/Merriweather-
19    OsF/m/it o
20    n input line 1007.
21    LaTeX Font Info:    Overwriting symbol font `mtletterfont' in version
22    `bold'
23    (Font)           T1/Merriweather-OsF/m/it --> T1/Merriweather-
24    OsF/bx/it
25    on input line 1007.
26    LaTeX Font Info:    Overwriting symbol font `mtoperatorfont' in version
27    `normal
28    '
29    (Font)           T1/Merriweather-OsF/m/n --> T1/Merriweather-
30    OsF/m/n on
31    input line 1007.
32    LaTeX Font Info:    Overwriting symbol font `mtoperatorfont' in version
33    `bold'
34    (Font)           T1/Merriweather-OsF/m/n --> T1/Merriweather-
35    OsF/bx/n on
36    input line 1007.
37    LaTeX Font Info:    Overwriting math alphabet `\\Mathbf' in version
38    `normal'
39    (Font)           T1/Merriweather-OsF/bx/n --> T1/Merriweather-
40    OsF/bx/n o
41    n input line 1007.
42    LaTeX Font Info:    Overwriting math alphabet `\\Mathbf' in version `bold'
43    (Font)           T1/Merriweather-OsF/bx/n --> T1/Merriweather-
44    OsF/bx/n o
45    n input line 1007.
46    LaTeX Font Info:    Overwriting math alphabet `\\Mathit' in version
47    `normal'
48    (Font)           T1/Merriweather-OsF/m/it --> T1/Merriweather-
49    OsF/m/it o
50    n input line 1007.
51    LaTeX Font Info:    Overwriting math alphabet `\\Mathit' in version `bold'
52    (Font)           T1/Merriweather-OsF/m/it --> T1/Merriweather-
53    OsF/bx/it
54    on input line 1007.
55    LaTeX Font Info:    Overwriting math alphabet `\\Mathsf' in version
56    `normal'
```

```
1  
2  
3  
4 (Font) T1/MerriweatherSans-TLF/m/n -->  
5 T1/MerriweatherSans-TLF  
6 /m/n on input line 1007.  
7 LaTeX Font Info: Overwriting math alphabet `\\Mathsf' in version `bold'  
8 (Font) T1/MerriweatherSans-TLF/m/n -->  
9 T1/MerriweatherSans-TLF  
10 /bx/n on input line 1007.  
11 LaTeX Font Info: Overwriting math alphabet `\\Mathtt' in version  
12 `normal'  
13 (Font) T1/lmtt/m/n --> T1/lmtt/m/n on input line 1007.  
14 LaTeX Font Info: Overwriting math alphabet `\\Mathtt' in version `bold'  
15 (Font) T1/lmtt/m/n --> T1/lmtt/bx/n on input line 1007.  
16 ** Latin letters in the normal (resp. bold) math versions are now  
17 ** set up to use the fonts T1/Merriweather-OsF/m(bx)/it  
18 ** Other characters (digits, ...) and \\log-like names will be  
19 ** typeset with the n shape.  
20 ** ! and ?  
21 ** punctuation: , . : ; and \\colon  
22 LaTeX Info: Redefining \\relbar on input line 1153.  
23 ** minus as endash  
24 ** \\hbar  
25 ** + and =  
26 LaTeX Info: Redefining \\Relbar on input line 1255.  
27 ** adding = ; and + to \\nfss@catcodes  
28 ** parentheses ( ) [ ] and slash /  
29 ** alldelims: < > \\backslash \setminus | \\vert \\mid \\{ and \\}  
30 LaTeX Font Info: Redeclaring math delimiter \\backslash on input line  
31 1301.  
32 LaTeX Font Info: Redeclaring math symbol \\setminus on input line 1313.  
33 LaTeX Info: Redefining \\models on input line 1322.  
34 ** \\# \\mathdollar \\% \\&  
35 ** \\i and \\j  
36 LaTeX Info: Redefining \\i on input line 1893.  
37 LaTeX Info: Redefining \\j on input line 1894.  
38 ** \\HUGE has been (re)-defined.  
39 ** mathastext has declared larger sizes for subscripts.  
40 ** To keep LaTeX defaults, use option `defaultmathsizes'.  
41 ) (c:/TeXLive/2015/texmf-dist/tex/latex/relsize/relsize.sty  
42 Package: relsize 2013/03/29 ver 4.1  
43 ) (c:/TeXLive/2015/texmf-dist/tex/latex/ms/ragged2e.sty  
44 Package: ragged2e 2009/05/21 v2.1 ragged2e Package (MS)  
45 (c:/TeXLive/2015/texmf-dist/tex/latex/ms/everysel.sty  
46 Package: everysel 2011/10/28 v1.2 EverySelectfont Package (MS)  
47 )  
48 \\CenteringLeftskip=\\skip44  
49 \\RaggedLeftLeftskip=\\skip45  
50 \\RaggedRightLeftskip=\\skip46  
51 \\CenteringRightskip=\\skip47  
52 \\RaggedLeftRightskip=\\skip48  
53 \\RaggedRightRightskip=\\skip49  
54 \\CenteringParfillskip=\\skip50  
55 \\RaggedLeftParfillskip=\\skip51  
56 \\RaggedRightParfillskip=\\skip52  
57 \\JustifyingParfillskip=\\skip53  
58  
59  
60  
61  
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63  
64  
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```

```
1
2
3
4 \CenteringParindent=\skip54
5 \RaggedLeftParindent=\skip55
6 \RaggedRightParindent=\skip56
7 \JustifyingParindent=\skip57
8 ) (c:/TeXLive/2015/texmf-dist/tex/latex/xcolor/xcolor.sty
9 Package: xcolor 2007/01/21 v2.11 LaTeX color extensions (UK)
10 (c:/TeXLive/2015/texmf-dist/tex/latex/latexconfig/color.cfg
11 File: color.cfg 2007/01/18 v1.5 color configuration of teTeX/TeXLive
12 )
13 Package xcolor Info: Driver file: pdftex.def on input line 225.
14 (c:/TeXLive/2015/texmf-dist/tex/latex/pdftex-def/pdftex.def
15 File: pdftex.def 2011/05/27 v0.06d Graphics/color for pdfTeX
16 (c:/TeXLive/2015/texmf-dist/tex/generic/oberdiek/infwarerr.sty
17 Package: infwarerr 2010/04/08 v1.3 Providing info/warning/error messages
18 (HO)
19 ) (c:/TeXLive/2015/texmf-dist/tex/generic/oberdiek/ltxcmds.sty
20 Package: ltxcmds 2011/11/09 v1.22 LaTeX kernel commands for general use
21 (HO)
22 )
23 \Gread@gobject=\count90
24 )
25 Package xcolor Info: Model `cmy' substituted by `cmy0' on input line
26 1337.
27 Package xcolor Info: Model `hsb' substituted by `rgb' on input line 1341.
28 Package xcolor Info: Model `RGB' extended on input line 1353.
29 Package xcolor Info: Model `HTML' substituted by `rgb' on input line
30 1355.
31 Package xcolor Info: Model `Hsb' substituted by `hsb' on input line 1356.
32 Package xcolor Info: Model `tHsb' substituted by `hsb' on input line
33 1357.
34 Package xcolor Info: Model `HSB' substituted by `hsb' on input line 1358.
35 Package xcolor Info: Model `Gray' substituted by `gray' on input line
36 1359.
37 Package xcolor Info: Model `wave' substituted by `hsb' on input line
38 1360.
39 ) (c:/TeXLive/2015/texmf-dist/tex/latex/colortbl/colortbl.sty
40 Package: colortbl 2012/02/13 v1.0a Color table columns (DPC)
41 (c:/TeXLive/2015/texmf-dist/tex/latex/tools/array.sty
42 Package: array 2014/10/28 v2.4c Tabular extension package (FMi)
43 \col@sep=\dimen104
44 \extrarowheight=\dimen105
45 \NC@list=\toks24
46 \extratabsurround=\skip58
47 \backup@length=\skip59
48 )
49 \everycr=\toks25
50 \minrowclearance=\skip60
51 ) (c:/TeXLive/2015/texmf-dist/tex/latex/graphics/graphicx.sty
52 Package: graphicx 2014/10/28 v1.0g Enhanced LaTeX Graphics (DPC,SPQR)
53 (c:/TeXLive/2015/texmf-dist/tex/latex/graphics/graphics.sty
54 Package: graphics 2016/01/03 v1.0q Standard LaTeX Graphics (DPC,SPQR)
55 (c:/TeXLive/2015/texmf-dist/tex/latex/graphics/trig.sty
56 Package: trig 2016/01/03 v1.10 sin cos tan (DPC)
57 ) (c:/TeXLive/2015/texmf-dist/tex/latex/latexconfig/graphics.cfg
58
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```

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1
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3
4     File: graphics.cfg 2010/04/23 v1.9 graphics configuration of TeX Live
5     )
6     Package graphics Info: Driver file: pdftex.def on input line 95.
7     )
8     \Gin@req@height=\dimen106
9     \Gin@req@width=\dimen107
10    ) (c:/TeXLive/2015/texmf-dist/tex/latex/etoolbox/etoolbox.sty
11    Package: etoolbox 2015/08/02 v2.2a e-TeX tools for LaTeX (JAW)
12    \etb@tempcnta=\count91
13    ) (c:/TeXLive/2015/texmf-dist/tex/latex/xpatch/xpatch.sty
14    (c:/TeXLive/2015/texm
15    f-dist/tex/latex/l3kernel/expl3.sty
16    Package: expl3 2016/03/28 v6468 L3 programming layer (loader)
17    (c:/TeXLive/2015/texmf-dist/tex/latex/l3kernel/expl3-code.tex
18    Package: expl3 2016/03/28 v6468 L3 programming layer (code)
19    L3 Module: l3bootstrap 2016/02/12 v6412 L3 Bootstrap code
20    L3 Module: l3names 2016/03/11 v6433 L3 Namespace for primitives
21    L3 Module: l3basics 2015/11/22 v6315 L3 Basic definitions
22    L3 Module: l3expan 2015/09/10 v5983 L3 Argument expansion
23    L3 Module: l3tl 2016/03/26 v6465 L3 Token lists
24    L3 Module: l3str 2016/03/24 v6441 L3 Strings
25    L3 Module: l3seq 2015/08/05 v5777 L3 Sequences and stacks
26    L3 Module: l3int 2016/03/24 v6441 L3 Integers
27    \c_max_int=\count92
28    \l_tmpa_int=\count93
29    \l_tmpb_int=\count94
30    \g_tmpa_int=\count95
31    \g_tmpb_int=\count96
32    L3 Module: l3quark 2015/08/17 v5855 L3 Quarks
33    L3 Module: l3prg 2015/11/01 v6216 L3 Control structures
34    \g_prg_map_int=\count97
35    L3 Module: l3clist 2015/09/02 v5901 L3 Comma separated lists
36    L3 Module: l3token 2016/03/26 v6465 L3 Experimental token manipulation
37    L3 Module: l3prop 2016/01/05 v6366 L3 Property lists
38    L3 Module: l3msg 2016/03/26 v6464 L3 Messages
39    L3 Module: l3file 2016/03/25 v6458 L3 File and I/O operations
40    \l_iow_line_count_int=\count98
41    \l_iow_target_count_int=\count99
42    \l_iow_current_line_int=\count100
43    \l_iow_current_word_int=\count101
44    \l_iow_current_indentation_int=\count102
45    L3 Module: l3skip 2016/01/05 v6366 L3 Dimensions and skips
46    \c_zero_dim=\dimen108
47    \c_max_dim=\dimen109
48    \l_tmpa_dim=\dimen110
49    \l_tmpb_dim=\dimen111
50    \g_tmpa_dim=\dimen112
51    \g_tmpb_dim=\dimen113
52    \c_zero_skip=\skip61
53    \c_max_skip=\skip62
54    \l_tmpa_skip=\skip63
55    \l_tmpb_skip=\skip64
56    \g_tmpa_skip=\skip65
57    \g_tmpb_skip=\skip66
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3
4 \c_zero_muskip=\muskip13
5 \c_max_muskip=\muskip14
6 \l_tmpa_muskip=\muskip15
7 \l_tmpb_muskip=\muskip16
8 \g_tmpa_muskip=\muskip17
9 \g_tmpb_muskip=\muskip18
10 L3 Module: 13keys 2015/11/17 v6284 L3 Key-value interfaces
11 \g_keyval_level_int=\count103
12 \l_keys_choice_int=\count104
13 L3 Module: 13fp 2016/03/26 v6465 L3 Floating points
14 \c_fp_leading_shift_int=\count105
15 \c_fp_middle_shift_int=\count106
16 \c_fp_trailing_shift_int=\count107
17 \c_fp_big_leading_shift_int=\count108
18 \c_fp_big_middle_shift_int=\count109
19 \c_fp_big_trailing_shift_int=\count110
20 \c_fp_Bigg_leading_shift_int=\count111
21 \c_fp_Bigg_middle_shift_int=\count112
22 \c_fp_Bigg_trailing_shift_int=\count113
23 L3 Module: 13box 2015/08/09 v5822 L3 Experimental boxes
24 \c_empty_box=\box26
25 \l_tmpa_box=\box27
26 \l_tmpb_box=\box28
27 \g_tmpa_box=\box29
28 \g_tmpb_box=\box30
29 L3 Module: 13coffins 2016/03/24 v6440 L3 Coffin code layer
30 \l_coffin_internal_box=\box31
31 \l_coffin_internal_dim=\dimen114
32 \l_coffin_offset_x_dim=\dimen115
33 \l_coffin_offset_y_dim=\dimen116
34 \l_coffin_x_dim=\dimen117
35 \l_coffin_y_dim=\dimen118
36 \l_coffin_x_prime_dim=\dimen119
37 \l_coffin_y_prime_dim=\dimen120
38 \c_empty_coffin=\box32
39 \l_coffin_aligned_coffin=\box33
40 \l_coffin_aligned_internal_coffin=\box34
41 \l_tmpa_coffin=\box35
42 \l_tmpb_coffin=\box36
43 \l_coffin_display_coffin=\box37
44 \l_coffin_display_coord_coffin=\box38
45 \l_coffin_display_pole_coffin=\box39
46 \l_coffin_display_offset_dim=\dimen121
47 \l_coffin_display_x_dim=\dimen122
48 \l_coffin_display_y_dim=\dimen123
49 L3 Module: 13color 2014/08/23 v5354 L3 Experimental color support
50 L3 Module: 13sys 2015/09/25 v6087 L3 Experimental system/runtime
51 functions
52 L3 Module: 13candidates 2016/03/25 v6456 L3 Experimental additions to
53 13kernel
54 \l_box_top_dim=\dimen124
55 \l_box_bottom_dim=\dimen125
56 \l_box_left_dim=\dimen126
57 \l_box_right_dim=\dimen127
58
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1
2
3
4 \l_box_top_new_dim=\dimen128
5 \l_box_bottom_new_dim=\dimen129
6 \l_box_left_new_dim=\dimen130
7 \l_box_right_new_dim=\dimen131
8 \l_box_internal_box=\box40
9 \l_coffin_bounding_shift_dim=\dimen132
10 \l_coffin_left_corner_dim=\dimen133
11 \l_coffin_right_corner_dim=\dimen134
12 \l_coffin_bottom_corner_dim=\dimen135
13 \l_coffin_top_corner_dim=\dimen136
14 \l_coffin_scaled_total_height_dim=\dimen137
15 \l_coffin_scaled_width_dim=\dimen138
16 L3 Module: l3luatex 2016/03/26 v6465 L3 Experimental LuaTeX-specific
17 functions
18 ) (c:/TeXLive/2015/texmf-dist/tex/latex/l3kernel/l3pdfmode.def
19 File: l3pdfmode.def 2016/03/26 v6465 L3 Experimental driver: PDF mode
20 \l_driver_color_stack_int=\count114
21 ))
22 Package: xpatch 2012/10/02 v0.3 Extending etoolbox patching commands
23 (c:/TeXLive/2015/texmf-dist/tex/latex/l3packages/xparse/xparse.sty
24 Package: xparse 2016/03/28 v6468 L3 Experimental document command parser
25 \l_xparse_current_arg_int=\count115
26 \l_xparse_m_args_int=\count116
27 \l_xparse_mandatory_args_int=\count117
28 \l_xparse_processor_int=\count118
29 \l_xparse_v_nesting_int=\count119
30 )
31 )
32 ..... .
33 . LaTeX info: "xparse/define-command"
34 .
35 . Defining command \xpatchcmd with sig. '' on line 125.
36 .
37 .
38 .
39 . LaTeX info: "xparse/define-command"
40 .
41 . Defining command \xpretocmd with sig. '' on line 126.
42 .
43 .
44 . LaTeX info: "xparse/define-command"
45 .
46 . Defining command \xapptocmd with sig. '' on line 127.
47 .
48 .
49 . LaTeX info: "xparse/define-command"
50 .
51 . Defining command \xshowcmd with sig. '' on line 128.
52 .
53 .
54 . LaTeX info: "xparse/define-command"
55 .
56 . Defining command \xpatchbibmacro with sig. 'm' on line 131.
57 .
58 .
59 .
60 . LaTeX info: "xparse/define-command"
61 .
62 .
63 .
64 .
65 
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1
2
3
4
5 . Defining command \xpretobibmacro with sig. 'm' on line 133.
6 ..... .
7 ..... .
8 . LaTeX info: "xparse/define-command"
9
10 . Defining command \xapptobibmacro with sig. 'm' on line 135.
11 ..... .
12 ..... .
13 . LaTeX info: "xparse/define-command"
14
15 . Defining command \xshowbibmacro with sig. 'm' on line 137.
16 ..... .
17 ..... .
18 . LaTeX info: "xparse/define-command"
19
20 . Defining command \xpatchfieldformat with sig. 'O{*}m' on line 139.
21 ..... .
22 ..... .
23 ..... .
24 . LaTeX info: "xparse/define-command"
25
26 . Defining command \xpretofieldformat with sig. 'O{*}m' on line 141.
27 ..... .
28 ..... .
29 . LaTeX info: "xparse/define-command"
30
31 . Defining command \xapptofieldformat with sig. 'O{*}m' on line 143.
32 ..... .
33 ..... .
34 . LaTeX info: "xparse/define-command"
35
36 . Defining command \xshowfieldformat with sig. 'O{*}m' on line 145.
37 ..... .
38 ..... .
39 . LaTeX info: "xparse/define-command"
40
41 . Defining command \xpatchnameformat with sig. 'O{*}m' on line 147.
42 ..... .
43 ..... .
44 . LaTeX info: "xparse/define-command"
45
46 . Defining command \xpretonameformat with sig. 'O{*}m' on line 149.
47 ..... .
48 ..... .
49 . LaTeX info: "xparse/define-command"
50
51 . Defining command \xapptonameformat with sig. 'O{*}m' on line 151.
52 ..... .
53 ..... .
54 . LaTeX info: "xparse/define-command"
55
56 . Defining command \xshownameformat with sig. 'O{*}m' on line 153.
57 ..... .
58 ..... .
59 ..... .
60 ..... .
61 ..... .
62 ..... .
63 ..... .
64 ..... .
65
```

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1  
2  
3  
4 . LaTeX info: "xparse/define-command"  
5 .  
6 . Defining command \xpatchlistformat with sig. 'O{*}m' on line 155.  
7 .....  
8 .....  
9 . LaTeX info: "xparse/define-command"  
10 .  
11 . Defining command \xpretolistformat with sig. 'O{*}m' on line 157.  
12 .....  
13 .....  
14 . LaTeX info: "xparse/define-command"  
15 .  
16 . Defining command \xapptolistformat with sig. 'O{*}m' on line 159.  
17 .....  
18 .....  
19 .....  
20 . LaTeX info: "xparse/define-command"  
21 .  
22 . Defining command \xshowlistformat with sig. 'O{*}m' on line 161.  
23 .....  
24 .....  
25 . LaTeX info: "xparse/define-command"  
26 .  
27 . Defining command \xpatchindexfieldformat with sig. 'O{*}m' on line 163.  
28 .....  
29 .....  
30 . LaTeX info: "xparse/define-command"  
31 .  
32 . Defining command \xpretoindexfieldformat with sig. 'O{*}m' on line 165.  
33 .....  
34 .....  
35 .....  
36 . LaTeX info: "xparse/define-command"  
37 .  
38 . Defining command \xapptoindexfieldformat with sig. 'O{*}m' on line 167.  
39 .....  
40 .....  
41 . LaTeX info: "xparse/define-command"  
42 .  
43 . Defining command \xshowindexfieldformat with sig. 'O{*}m' on line 169.  
44 .....  
45 .....  
46 . LaTeX info: "xparse/define-command"  
47 .  
48 . Defining command \xpatchindexnameformat with sig. 'O{*}m' on line 171.  
49 .....  
50 .....  
51 . LaTeX info: "xparse/define-command"  
52 .  
53 . Defining command \xpretoindexnameformat with sig. 'O{*}m' on line 173.  
54 .....  
55 .....  
56 . LaTeX info: "xparse/define-command"  
57 .  
58 . Defining command \xapptoindexnameformat with sig. 'O{*}m' on line 175.  
59 .....  
60 .....  
61 .....  
62 .....  
63 .....  
64 .....  
65 .....
```

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1  
2  
3  
4  
5 .....  
6 . LaTeX info: "xparse/define-command"  
7 . Defining command \xshowindexnameformat with sig. 'O{*}m' on line 177.  
8 .....  
9 .....  
10 .....  
11 . LaTeX info: "xparse/define-command"  
12 . Defining command \xpatchindexlistformat with sig. 'O{*}m' on line 179.  
13 .....  
14 .....  
15 .....  
16 . LaTeX info: "xparse/define-command"  
17 . Defining command \xpretoindexlistformat with sig. 'O{*}m' on line 181.  
18 .....  
19 .....  
20 .....  
21 . LaTeX info: "xparse/define-command"  
22 . Defining command \xappendextolistformat with sig. 'O{*}m' on line 183.  
23 .....  
24 .....  
25 .....  
26 . LaTeX info: "xparse/define-command"  
27 . Defining command \xshowindexlistformat with sig. 'O{*}m' on line 185.  
28 .....  
29 .....  
30 .....  
31 . LaTeX info: "xparse/define-command"  
32 . Defining command \xpatchbibdriver with sig. 'm' on line 187.  
33 .....  
34 .....  
35 .....  
36 .....  
37 . LaTeX info: "xparse/define-command"  
38 . Defining command \xpretobibdriver with sig. 'm' on line 189.  
39 .....  
40 .....  
41 .....  
42 . LaTeX info: "xparse/define-command"  
43 . Defining command \xapptobibdriver with sig. 'm' on line 191.  
44 .....  
45 .....  
46 .....  
47 . LaTeX info: "xparse/define-command"  
48 . Defining command \xshowbibdriver with sig. 'm' on line 193.  
49 .....  
50 .....  
51 ) (c:/TeXLive/2015/texmf-dist/tex/latex/environ/environ.sty  
52 Package: environ 2014/05/04 v0.3 A new way to define environments  
53 (c:/TeXLive/2015/texmf-dist/tex/latex/trimspace/trimspace.sty  
54 Package: trimspace 2009/09/17 v1.1 Trim spaces around a token list  
55 )  
56 \@envbody=\toks26  
57 ) (c:/TeXLive/2015/texmf-dist/tex/latex/lastpage/lastpage.sty  
58 Package: lastpage 2015/03/29 v1.2m Refers to last page's name (HMM; JPG)  
59 ) (c:/TeXLive/2015/texmf-dist/tex/latex/rotating/rotating.sty  
60  
61  
62  
63  
64  
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```

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1
2
3
4 Package: rotating 2009/03/28 v2.16a rotated objects in LaTeX
5 (c:/TeXLive/2015/texmf-dist/tex/latex/base/ifthen.sty
6 Package: ifthen 2014/09/29 v1.1c Standard LaTeX ifthen package (DPC)
7 )
8 \c@r@tf1@t=\count120
9 \rotFPtop=\skip67
10 \rotFPbot=\skip68
11 \rot@float@box=\box41
12 \rot@mess@toks=\toks27
13 ) (c:/TeXLive/2015/texmf-dist/tex/latex/graphics/lshape.sty
14 Package: lshape 2000/10/22 v3.01 Landscape Pages (DPC)
15 ) (c:/TeXLive/2015/texmf-dist/tex/latex/tools/afterpage.sty
16 Package: afterpage 2014/10/28 v1.08 After-Page Package (DPC)
17 \AP@output=\toks28
18 \AP@partial=\box42
19 \AP@footins=\box43
20 ) (c:/TeXLive/2015/texmf-dist/tex/latex/textpos/textpos.sty
21 Package: textpos 2014/01/03 v1.7j
22 Package: textpos 2014/01/03 1.7j, absolute positioning of text on the
23 page
24 (c:/TeXLive/2015/texmf-dist/tex/latex/ms/everyshi.sty
25 Package: everyshi 2001/05/15 v3.00 EveryShipout Package (MS)
26 )
27 \TP@textbox=\box44
28 \TP@holdbox=\box45
29 \TPHorizModule=\dimen139
30 \TPVertModule=\dimen140
31 \TP@margin=\dimen141
32 \TP@absmargin=\dimen142
33 Grid set 16 x 16 = 37.34424pt x 52.81541pt
34 \TPboxrulesize=\dimen143
35 \TP@ox=\dimen144
36 \TP@oy=\dimen145
37 \TP@tbargs=\toks29
38 \TP@prevdepth=\dimen146
39 TextBlockOrigin set to 0pt x 0pt
40 ) (c:/TeXLive/2015/texmf-dist/tex/latex/url/url.sty
41 \Urlmuskip=\muskip19
42 Package: url 2013/09/16 ver 3.4 Verb mode for urls, etc.
43 ) (c:/TeXLive/2015/texmf-dist/tex/latex/caption/newfloat.sty
44 Package: newfloat 2015/09/17 v1.1-109 Defining new floating environments
45 (AR)
46 ) (c:/TeXLive/2015/texmf-dist/tex/latex/mdframed/mdframed.sty
47 Package: mdframed 2013/07/01 1.9b: mdframed
48 (c:/TeXLive/2015/texmf-dist/tex/latex/oberdiek/kvoptions.sty
49 Package: kvoptions 2011/06/30 v3.11 Key value format for package options
50 (HO)
51 (c:/TeXLive/2015/texmf-dist/tex/generic/oberdiek/kvsetkeys.sty
52 Package: kvsetkeys 2012/04/25 v1.16 Key value parser (HO)
53 (c:/TeXLive/2015/texmf-dist/tex/generic/oberdiek/etexcmds.sty
54 Package: etexcmds 2011/02/16 v1.5 Avoid name clashes with e-TeX commands
55 (HO)
56 Package etexcmds Info: Could not find \expanded.
57
58
59
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```

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1  
2  
3  
4 (etexcmds)           That can mean that you are not using pdfTeX 1.50  
5 or  
6 (etexcmds)           that some package has redefined \expanded.  
7 (etexcmds)           In the latter case, load this package earlier.  
8 )) (c:/TeXLive/2015/texmf-dist/tex/latex/oberdiek/zref-abspage.sty  
9 Package: zref-abspage 2012/04/04 v2.24 Module abspage for zref (HO)  
10 (c:/TeXLive/2015/texmf-dist/tex/latex/oberdiek/zref-base.sty  
11 Package: zref-base 2012/04/04 v2.24 Module base for zref (HO)  
12 (c:/TeXLive/2015/texmf-dist/tex/generic/oberdiek/kvdefinekeys.sty  
13 Package: kvdefinekeys 2011/04/07 v1.3 Define keys (HO)  
14 ) (c:/TeXLive/2015/texmf-dist/tex/generic/oberdiek/pdftexcmds.sty  
15 Package: pdftexcmds 2011/11/29 v0.20 Utility functions of pdfTeX for  
16 LuaTeX (HO  
17 )  
18 Package pdftexcmds Info: LuaTeX not detected.  
19 Package pdftexcmds Info: \pdf@primitive is available.  
20 Package pdftexcmds Info: \pdf@ifprimitive is available.  
21 Package pdftexcmds Info: \pdfdraftmode found.  
22 ) (c:/TeXLive/2015/texmf-dist/tex/latex/oberdiek/auxhook.sty  
23 Package: auxhook 2011/03/04 v1.3 Hooks for auxiliary files (HO)  
24 )  
25 Package zref Info: New property list: main on input line 759.  
26 Package zref Info: New property: default on input line 760.  
27 Package zref Info: New property: page on input line 761.  
28 ) (c:/TeXLive/2015/texmf-dist/tex/generic/oberdiek/atbegshi.sty  
29 Package: atbegshi 2011/10/05 v1.16 At begin shipout hook (HO)  
30 )  
31 \c@abspage=\count121  
32 Package zref Info: New property: abspace on input line 62.  
33 ) (c:/TeXLive/2015/texmf-dist/tex/latex/needspace/needspace.sty  
34 Package: needspace 2010/09/12 v1.3d reserve vertical space  
35 )  
36 \mdf@templength=\skip69  
37 \c@mdf@globalstyle@cnt=\count122  
38 \mdf@skipabove@length=\skip70  
39 \mdf@skipbelow@length=\skip71  
40 \mdf@leftmargin@length=\skip72  
41 \mdf@rightmargin@length=\skip73  
42 \mdf@innerleftmargin@length=\skip74  
43 \mdf@innerrightmargin@length=\skip75  
44 \mdf@innertopmargin@length=\skip76  
45 \mdf@innerbottommargin@length=\skip77  
46 \mdf@splittopskip@length=\skip78  
47 \mdf@splitbottomskip@length=\skip79  
48 \mdf@outermargin@length=\skip80  
49 \mdf@innermargin@length=\skip81  
50 \mdf@linewidth@length=\skip82  
51 \mdf@innerlinewidth@length=\skip83  
52 \mdf@middlelinewidth@length=\skip84  
53 \mdf@outerlinewidth@length=\skip85  
54 \mdf@roundcorner@length=\skip86  
55 \mdf@footenotedistance@length=\skip87  
56 \mdf@userdefinedwidth@length=\skip88  
57 \mdf@needspace@length=\skip89  
58  
59  
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1  
2  
3  
4 \mdf@frametitleaboveskip@length=\skip90  
5 \mdf@frametitlebelowskip@length=\skip91  
6 \mdf@frametitlerulewidth@length=\skip92  
7 \mdf@frametitleleftmargin@length=\skip93  
8 \mdf@frametitlerightmargin@length=\skip94  
9 \mdf@shadowsize@length=\skip95  
10 \mdf@extratopheight@length=\skip96  
11 \mdf@subtitleabovelinewidth@length=\skip97  
12 \mdf@subtitlebelowlinewidth@length=\skip98  
13 \mdf@subtitleaboveskip@length=\skip99  
14 \mdf@subtitlebelowskip@length=\skip100  
15 \mdf@subtitleinneraboveskip@length=\skip101  
16 \mdf@subtitleinnerbelowskip@length=\skip102  
17 \mdf@subsubtitleabovelinewidth@length=\skip103  
18 \mdf@subsubtitlebelowlinewidth@length=\skip104  
19 \mdf@subsubtitleaboveskip@length=\skip105  
20 \mdf@subsubtitlebelowskip@length=\skip106  
21 \mdf@subsubtitleinneraboveskip@length=\skip107  
22 \mdf@subsubtitleinnerbelowskip@length=\skip108  
23 (c:/TeXLive/2015/texmf-dist/tex/latex/mdframed/md-frame-0.mdf  
24 File: md-frame-0.mdf 2013/07/01\ 1.9b: md-frame-0  
25 )  
26 \mdf@frametitlebox=\box46  
27 \mdf@footnotebox=\box47  
28 \mdf@splitbox@one=\box48  
29 \mdf@splitbox@two=\box49  
30 \mdf@splitbox@save=\box50  
31 \mdfsplitboxwidth=\skip109  
32 \mdfsplitboxtotalwidth=\skip110  
33 \mdfsplitboxheight=\skip111  
34 \mdfsplitboxdepth=\skip112  
35 \mdfsplitboxtotalheight=\skip113  
36 \mdfframetitleboxwidth=\skip114  
37 \mdfframetitleboxtotalwidth=\skip115  
38 \mdfframetitleboxheight=\skip116  
39 \mdfframetitleboxdepth=\skip117  
40 \mdfframetitleboxtotalheight=\skip118  
41 \mdffootnoteboxwidth=\skip119  
42 \mdffootnoteboxtotalwidth=\skip120  
43 \mdffootnoteboxheight=\skip121  
44 \mdffootnoteboxdepth=\skip122  
45 \mdffootnoteboxtotalheight=\skip123  
46 \mdftotallinewidth=\skip124  
47 \mdfboundingboxwidth=\skip125  
48 \mdfboundingboxtotalwidth=\skip126  
49 \mdfboundingboxheight=\skip127  
50 \mdfboundingboxdepth=\skip128  
51 \mdfboundingboxtotalheight=\skip129  
52 \mdf@freevspace@length=\skip130  
53 \mdf@horizontalwidthofbox@length=\skip131  
54 \mdf@verticalmarginwhole@length=\skip132  
55 \mdf@horizontalinspaceofbox=\skip133  
56 \mdfsubtitleheight=\skip134  
57 \mdfsubsubtitleheight=\skip135  
58  
59  
60  
61  
62  
63  
64  
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```

```
1
2
3
4 \c@mdfcountframes=\count123
5
6 ***** mdframed patching \endmdf@trivlist
7
8 ***** -- success*****
9
10 .....
11 . LaTeX info: "xparse/define-command"
12 .
13 . Defining command \newmdtheoremenv with sig. 'O{} m o m o ' on line 601.
14 .....
15 .....
16 .....
17 . LaTeX info: "xparse/define-command"
18 .
19 . Defining command \mdtheorem with sig. ' O{} m o m o ' on line 701.
20 .....
21 \mdf@envdepth=\count124
22 \c@mdf@env@i=\count125
23 \c@mdf@env@ii=\count126
24 \c@mdf@zref@counter=\count127
25 Package zref Info: New property: mdf@pagevalue on input line 895.
26 ) (c:/TeXLive/2015/texmf-dist/tex/latex/titlesec/titlesec.sty
27 Package: titlesec 2016/03/21 v2.10.2 Sectioning titles
28 \ttl@box=\box51
29 \beforetitleunit=\skip136
30 \aftertitleunit=\skip137
31 \ttl@plus=\dimen147
32 \ttl@minus=\dimen148
33 \ttl@toksa=\toks30
34 \titlewidth=\dimen149
35 \titlewidthlast=\dimen150
36 \titlewidthfirst=\dimen151
37 ) (c:/TeXLive/2015/texmf-dist/tex/latex/koma-script/scrextend.sty
38 Package: scrextend 2015/10/03 v3.19a KOMA-Script package (extend other
39 classes
40 with features of KOMA-Script classes)
41 (c:/TeXLive/2015/texmf-dist/tex/latex/koma-script/scrkbase.sty
42 Package: scrkbase 2015/10/03 v3.19a KOMA-Script package (KOMA-Script-
43 dependent
44 basics and keyval usage)
45 (c:/TeXLive/2015/texmf-dist/tex/latex/koma-script/scrbase.sty
46 Package: scrbase 2015/10/03 v3.19a KOMA-Script package (KOMA-Script-
47 independent
48 basics and keyval usage)
49 (c:/TeXLive/2015/texmf-dist/tex/latex/koma-script/scrlfile.sty
50 Package: scrlfile 2015/10/03 v3.19a KOMA-Script package (loading files)
51 Package scrlfile, 2015/10/03 v3.19a KOMA-Script package (loading files)
52 Copyright (C) Markus Kohm
53
54 ))
55 LaTeX Info: Redefining \textsubscript on input line 1277.
56 Package scrextend Info: unexpected definition of `@\makefnmark'.
57 (scrextend) Trying to patch it on input line 1391.
58 Package scrextend Info: patch seems to be successfull on input line 1391.
59
60
61
62
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64
65
```

```
1
2
3
4 )
5
6 LaTeX Font Warning: Font shape `T1/cmr/m/n' in size <7.5> not available
7 (Font)           size <7> substituted on input line 65.
8
9 (c:/TeXLive/2015/texmf-dist/tex/latex/tools/calc.sty
10 Package: calc 2014/10/28 v4.3 Infix arithmetic (KKT,FJ)
11 \calc@Acount=\count128
12 \calc@Bcount=\count129
13 \calc@Adimen=\dimen152
14 \calc@Bdimen=\dimen153
15 \calc@Askip=\skip138
16 \calc@Bskip=\skip139
17 LaTeX Info: Redefining \setlength on input line 80.
18 LaTeX Info: Redefining \addtolength on input line 81.
19 \calc@Ccount=\count130
20 \calc@Cskip=\skip140
21 ) (c:/TeXLive/2015/texmf-dist/tex/latex/geometry/geometry.sty
22 Package: geometry 2010/09/12 v5.6 Page Geometry
23 (c:/TeXLive/2015/texmf-dist/tex/generic/oberdiek/ifvtex.sty
24 Package: ifvtex 2010/03/01 v1.5 Detect VTeX and its facilities (HO)
25 Package ifvtex Info: VTeX not detected.
26 )
27 \Gm@cnth=\count131
28 \Gm@cntv=\count132
29 \c@Gm@tempcnt=\count133
30 \Gm@bindingoffset=\dimen154
31 \Gm@wd@mp=\dimen155
32 \Gm@odd@mp=\dimen156
33 \Gm@even@mp=\dimen157
34 \Gm@layoutwidth=\dimen158
35 \Gm@layoutheight=\dimen159
36 \Gm@layouthoffset=\dimen160
37 \Gm@layoutvoffset=\dimen161
38 \Gm@dimlist=\toks31
39 ) (c:/TeXLive/2015/texmf-dist/tex/latex/hyperref/hyperref.sty
40 Package: hyperref 2012/11/06 v6.83m Hypertext links for LaTeX
41 (c:/TeXLive/2015/texmf-dist/tex/generic/oberdiek/hobsub-hyperref.sty
42 Package: hobsub-hyperref 2012/05/28 v1.13 Bundle oberdiek, subset
43 hyperref (HO)
44
45 (c:/TeXLive/2015/texmf-dist/tex/generic/oberdiek/hobsub-generic.sty
46 Package: hobsub-generic 2012/05/28 v1.13 Bundle oberdiek, subset generic
47 (HO)
48 Package: hobsub 2012/05/28 v1.13 Construct package bundles (HO)
49 Package hobsub Info: Skipping package `infwarerr' (already loaded).
50 Package hobsub Info: Skipping package `ltxcmds' (already loaded).
51 Package hobsub Info: Skipping package `ifluatex' (already loaded).
52 Package hobsub Info: Skipping package `ifvtex' (already loaded).
53 Package: intcalc 2007/09/27 v1.1 Expandable calculations with integers
54 (HO)
55 Package hobsub Info: Skipping package `ifpdf' (already loaded).
56 Package hobsub Info: Skipping package `etexcmds' (already loaded).
57 Package hobsub Info: Skipping package `kvsetkeys' (already loaded).
58
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1
2
3
4 Package hobsub Info: Skipping package `kvdefinekeys' (already loaded).
5 Package hobsub Info: Skipping package `pdftexcmds' (already loaded).
6 Package: pdfescape 2011/11/25 v1.13 Implements pdfTeX's escape features
7 (HO)
8 Package: bigintcalc 2012/04/08 v1.3 Expandable calculations on big
9 integers (HO)
10 )
11 Package: bitset 2011/01/30 v1.1 Handle bit-vector datatype (HO)
12 Package: uniquecounter 2011/01/30 v1.2 Provide unlimited unique counter
13 (HO)
14 )
15 Package hobsub Info: Skipping package `hobsub' (already loaded).
16 Package: letltxmacro 2010/09/02 v1.4 Let assignment for LaTeX macros (HO)
17 Package: hopatch 2012/05/28 v1.2 Wrapper for package hooks (HO)
18 Package: xcolor-patch 2011/01/30 xcolor patch
19 Package: atveryend 2011/06/30 v1.8 Hooks at the very end of document (HO)
20 Package hobsub Info: Skipping package `atbegshi' (already loaded).
21 Package: refcount 2011/10/16 v3.4 Data extraction from label references
22 (HO)
23 Package: hycolor 2011/01/30 v1.7 Color options for hyperref/bookmark (HO)
24 )
25 \@linkdim=\dimen162
26 \Hy@linkcounter=\count134
27 \Hy@pagecounter=\count135
28 (c:/TeXLive/2015/texmf-dist/tex/latex/hyperref/pd1enc.def
29 File: pd1enc.def 2012/11/06 v6.83m Hyperref: PDFDocEncoding definition
30 (HO)
31 Now handling font encoding PD1 ...
32 ... no UTF-8 mapping file for font encoding PD1
33 )
34 \Hy@SavedSpaceFactor=\count136
35 (c:/TeXLive/2015/texmf-dist/tex/latex/latexconfig/hyperref.cfg
36 File: hyperref.cfg 2002/06/06 v1.2 hyperref configuration of TeXLive
37 )
38 Package hyperref Info: Option `colorlinks' set `true' on input line 4319.
39 Package hyperref Info: Hyper figures OFF on input line 4443.
40 Package hyperref Info: Link nesting OFF on input line 4448.
41 Package hyperref Info: Hyper index ON on input line 4451.
42 Package hyperref Info: Plain pages OFF on input line 4458.
43 Package hyperref Info: Backreferencing OFF on input line 4463.
44 Package hyperref Info: Implicit mode ON; LaTeX internals redefined.
45 Package hyperref Info: Bookmarks ON on input line 4688.
46 \c@Hy@tempcnt=\count137
47 LaTeX Info: Redefining \url on input line 5041.
48 \XeTeXLinkMargin=\dimen163
49 \Fld@menulength=\count138
50 \Field@Width=\dimen164
51 \Fld@charsize=\dimen165
52 Package hyperref Info: Hyper figures OFF on input line 6295.
53 Package hyperref Info: Link nesting OFF on input line 6300.
54 Package hyperref Info: Hyper index ON on input line 6303.
55 Package hyperref Info: backreferencing OFF on input line 6310.
56 Package hyperref Info: Link coloring ON on input line 6313.
57 Package hyperref Info: Link coloring with OCG OFF on input line 6320.
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2
3
4 Package hyperref Info: PDF/A mode OFF on input line 6325.
5 LaTeX Info: Redefining \ref on input line 6365.
6 LaTeX Info: Redefining \pageref on input line 6369.
7 \Hy@abspage=\count139
8 \c@Item=\count140
9 \c@Hfootnote=\count141
10 )
11
12 Package hyperref Message: Driver (autodetected): hpdftex.
13
14 (c:/TeXLive/2015/texmf-dist/tex/latex/hyperref/hpdftex.def
15 File: hpdftex.def 2012/11/06 v6.83m Hyperref driver for pdfTeX
16 \HyAnn@Count=\count142
17 \Fld@listcount=\count143
18 \c@bookmark@seq@number=\count144
19 (c:/TeXLive/2015/texmf-dist/tex/latex/oberdiek/rerunfilecheck.sty
20 Package: rerunfilecheck 2011/04/15 v1.7 Rerun checks for auxiliary files
21 (HO)
22 Package uniquecounter Info: New unique counter `rerunfilecheck' on input
23 line 2
24 82.
25 )
26 \Hy@SectionHShift=\skip141
27 ) (c:/TeXLive/2015/texmf-dist/tex/latex/preprint/authblk.sty
28 Package: authblk 2001/02/27 1.3 (PWD)
29 \affilsep=\skip142
30 \@affilsep=\skip143
31 \c@Maxaffil=\count145
32 \c@authors=\count146
33 \c@affil=\count147
34 ) (c:/TeXLive/2015/texmf-dist/tex/latex/footmisc/footmisc.sty
35 Package: footmisc 2011/06/06 v5.5b a miscellany of footnote facilities
36 \FN@temptoken=\toks32
37 \footnotemargin=\dimen166
38 \c@pp@next@reset=\count148
39 Package footmisc Info: Declaring symbol style bringhurst on input line
40 855.
41 Package footmisc Info: Declaring symbol style chicago on input line 863.
42 Package footmisc Info: Declaring symbol style wiley on input line 872.
43 Package footmisc Info: Declaring symbol style lamport-robust on input
44 line 883.
45
46 Package footmisc Info: Declaring symbol style lamport* on input line 903.
47 Package footmisc Info: Declaring symbol style lamport*-robust on input
48 line 924
49 .
50 ) (c:/TeXLive/2015/texmf-dist/tex/latex/fancyhdr/fancyhdr.sty
51 \fancy@headwidth=\skip144
52 \f@ncyo@elh=\skip145
53 \f@ncyo@erh=\skip146
54 \f@ncyo@olh=\skip147
55 \f@ncyo@orh=\skip148
56 \f@ncyo@elf=\skip149
57 \f@ncyo@erf=\skip150
58
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```

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1
2
3
4 \f@ncyO@olf=\skip151
5 \f@ncyO@orf=\skip152
6 ) (c:/TeXLive/2015/texmf-dist/tex/generic/oberdiek/alphalph.sty
7 Package: alphalph 2011/05/13 v2.4 Convert numbers to letters (HO)
8 )
9 \c@authorfn=\count149
10 (c:/TeXLive/2015/texmf-dist/tex/latex/abstract/abstract.sty
11 Package: abstract 2009/06/08 v1.2a configurable abstracts
12 \abstitleskip=\skip153
13 \absleftindent=\skip154
14 \absrightindent=\skip155
15 \absparindent=\skip156
16 \absparsep=\skip157
17 )
18 Package newfloat Info: New float `keypoints' with options
19 `placement=t!,name=kp
20 t' on input line 286.
21 \c@keypoints=\count150
22 \newfloat@ftype=\count151
23 Package newfloat Info: float type `keypoints'=8 on input line 286.
24 (c:/TeXLive/2015/texmf-dist/tex/latex/enumitem/enumitem.sty
25 Package: enumitem 2011/09/28 v3.5.2 Customized lists
26 \labelindent=\skip158
27 \enit@outerparindent=\dimen167
28 \enit@toks=\toks33
29 \enit@inbox=\box52
30 \enitdp@description=\count152
31 ) (c:/TeXLive/2015/texmf-dist/tex/latex/quoting/quoting.sty
32 Package: quoting 2014/01/28 v0.1c Consolidated environment for displayed
33 text
34 \quo@toppartop=\skip159
35 ) (c:/TeXLive/2015/texmf-dist/tex/latex/stfplots/stfplots.sty
36 Package: stfplots 2016/02/08 v2.0 Improve float mechanism and
37 baselineskip sett
38 ings
39 \dblbotnum=\count153
40 \c@dblbotnumber=\count154
41 ) (c:/TeXLive/2015/texmf-dist/tex/latex/booktabs/booktabs.sty
42 Package: booktabs 2005/04/14 v1.61803 publication quality tables
43 \heavyrulewidth=\dimen168
44 \lightrulewidth=\dimen169
45 \cmidrulewidth=\dimen170
46 \belowrulesep=\dimen171
47 \belowbottomsep=\dimen172
48 \aboverulesep=\dimen173
49 \abovetopsep=\dimen174
50 \cmidrulesep=\dimen175
51 \cmidrulekern=\dimen176
52 \defaultaddspace=\dimen177
53 \cmidla=\count155
54 \cmidlb=\count156
55 \aboverulesep=\dimen178
56 \belowrulesep=\dimen179
57 \thisruleclass=\count157
58
59
60
61
62
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1
2
3
4     \@lastruleclass=\count158
5     \@thisrulewidth=\dimen180
6 ) (c:/TeXLive/2015/texmf-dist/tex/latex/tools/tabularx.sty
7 Package: tabularx 2016/02/03 v2.11 `tabularx' package (DPC)
8 \TX@col@width=\dimen181
9 \TX@old@table=\dimen182
10 \TX@old@col=\dimen183
11 \TX@target=\dimen184
12 \TX@delta=\dimen185
13 \TX@cols=\count159
14 \TX@ftn=\toks34
15 )
16 \enitdp@tablenotes=\count160
17 (c:/TeXLive/2015/texmf-dist/tex/latex/caption/caption.sty
18 Package: caption 2016/02/21 v3.3-144 Customizing captions (AR)
19 (c:/TeXLive/2015/texmf-dist/tex/latex/caption/caption3.sty
20 Package: caption3 2016/02/04 v1.7-139 caption3 kernel (AR)
21 Package caption3 Info: TeX engine: e-TeX on input line 67.
22 \captionmargin=\dimen186
23 \captionmargin@=\dimen187
24 \captionwidth=\dimen188
25 \caption@tempdima=\dimen189
26 \caption@indent=\dimen190
27 \caption@parindent=\dimen191
28 \caption@hangindent=\dimen192
29 )
30 \c@ContinuedFloat=\count161
31 Package caption Info: hyperref package is loaded.
32 Package caption Info: rotating package is loaded.
33 ) (c:/TeXLive/2015/texmf-dist/tex/latex/natbib/natbib.sty
34 Package: natbib 2010/09/13 8.31b (PWD, AO)
35 \bibhang=\skip160
36 \bibsep=\skip161
37 LaTeX Info: Redefining \cite on input line 694.
38 \c@NAT@ctr=\count162
39 )) (c:/TeXLive/2015/texmf-dist/tex/latex/siunitx/siunitx.sty
40 Package: siunitx 2016/03/01 v2.6q A comprehensive (SI) units package
41 (c:/TeXLive/2015/texmf-dist/tex/latex/amsmath/amstext.sty
42 Package: amstext 2000/06/29 v2.01 AMS text
43 (c:/TeXLive/2015/texmf-dist/tex/latex/amsmath/amsgen.sty
44 File: amsgen.sty 1999/11/30 v2.0 generic functions
45 \emptytoks=\toks35
46 \ex@=\dimen193
47 )) (c:/TeXLive/2015/texmf-dist/tex/13packages/13keys2e/13keys2e.sty
48 Package: 13keys2e 2016/03/28 v6468 LaTeX2e option processing using LaTeX3
49 keys
50 )
51 \siunitx_tmp_box=\box53
52 \siunitx_tmp_dim=\dimen194
53 \siunitx_tmp_int=\count163
54 \siunitx_number_mantissa_length_int=\count164
55 \siunitx_number_uncert_length_int=\count165
56 \siunitx_round_int=\count166
57 \siunitx_process_decimal_int=\count167
58
59
60
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64
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```

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1
2
3
4 \l_siunitx_process_uncertainty_int=\count168
5 \l_siunitx_process_fixed_int=\count169
6 \l_siunitx_process_integer_min_int=\count170
7 \l_siunitx_process_precision_int=\count171
8 \l_siunitx_group_min_int=\count172
9 \l_siunitx_angle_marker_box=\box54
10 \l_siunitx_angle_unit_box=\box55
11 \l_siunitx_angle_marker_dim=\dimen195
12 \l_siunitx_angle_unit_dim=\dimen196
13 \l_siunitx_unit_int=\count173
14 \l_siunitx_unit_denominator_int=\count174
15 \l_siunitx_unit_numerator_int=\count175
16 \l_siunitx_unit_prefix_int=\count176
17 \l_siunitx_unit_prefix_base_int=\count177
18 \l_siunitx_unit_prefix_gram_int=\count178
19 \l_siunitx_number_product_int=\count179
20 \c_siunitx_one_fill_skip=\skip162
21 \l_siunitx_table_unit_align_skip=\skip163
22 \l_siunitx_table_exponent_dim=\dimen197
23 \l_siunitx_table_integer_dim=\dimen198
24 \l_siunitx_table_mantissa_dim=\dimen199
25 \l_siunitx_table_marker_dim=\dimen256
26 \l_siunitx_table_result_dim=\dimen257
27 \l_siunitx_table_uncert_dim=\dimen258
28 \l_siunitx_table_fill_pre_dim=\dimen259
29 \l_siunitx_table_fill_post_dim=\dimen260
30 \l_siunitx_table_fill_mid_dim=\dimen261
31 \l_siunitx_table_pre_box=\box56
32 \l_siunitx_table_post_box=\box57
33 \l_siunitx_table_mantissa_box=\box58
34 \l_siunitx_table_result_box=\box59
35 \l_siunitx_table_number_align_skip=\skip164
36 \l_siunitx_table_text_align_skip=\skip165
37 .
38 .
39 .
40 . LaTeX info: "xparse/define-command"
41 .
42 . Defining command \DeclareBinaryPrefix with sig. 'mmm' on line 7218.
43 .
44 .
45 . LaTeX info: "xparse/define-command"
46 .
47 . Defining command \DeclareSIPostPower with sig. 'mm' on line 7221.
48 .
49 .
50 . LaTeX info: "xparse/define-command"
51 .
52 . Defining command \DeclareSIPrefix with sig. 'mmm' on line 7224.
53 .
54 .
55 . LaTeX info: "xparse/define-command"
56 .
57 . Defining command \DeclareSIPrePower with sig. 'mm' on line 7227.
58 .
59 .
60 .
61 .
62 .
63 .
64 .
65 
```

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1  
2  
3  
4 . LaTeX info: "xparse/define-command"  
5 .  
6 . Defining command \DeclareSIQualifier with sig. 'mm' on line 7230.  
7 .....  
8 .....  
9 . LaTeX info: "xparse/define-command"  
10 .  
11 . Defining command \DeclareSIUnit with sig. 'O{}mm' on line 7233.  
12 .....  
13 .....  
14 . LaTeX info: "xparse/define-command"  
15 .  
16 . Defining command \DeclareSIUnitWithOptions with sig. 'mmm' on line  
17 7236.  
18 .....  
19 .....  
20 .....  
21 . LaTeX info: "xparse/define-command"  
22 .  
23 . Defining command \ang with sig. 'o>{\SplitArgument {2}{;}}m' on line  
24 7251.  
25 .....  
26 .....  
27 . LaTeX info: "xparse/define-command"  
28 .  
29 . Defining command \num with sig. 'om' on line 7260.  
30 .....  
31 .....  
32 . LaTeX info: "xparse/define-command"  
33 .  
34 . Defining command \numlist with sig. 'o>{\SplitList {;}}m' on line 7269.  
35 .....  
36 .....  
37 .....  
38 . LaTeX info: "xparse/define-command"  
39 .  
40 . Defining command \numrange with sig. 'omm' on line 7278.  
41 .....  
42 .....  
43 . LaTeX info: "xparse/define-command"  
44 .  
45 . Defining command \SIList with sig. 'o>{\SplitList {;}}mm' on line 7290.  
46 .....  
47 .....  
48 . LaTeX info: "xparse/define-command"  
49 .  
50 . Defining command \SIrange with sig. 'ommm' on line 7302.  
51 .....  
52 .....  
53 . LaTeX info: "xparse/define-command"  
54 .  
55 . Defining command \SI with sig. 'omom' on line 7314.  
56 .....  
57 .....  
58 .....  
59 . LaTeX info: "xparse/define-command"  
60 .  
61  
62  
63  
64  
65
```

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1  
2  
3  
4 . Defining command \sisetup with sig. 'm' on line 7317.  
5 .....  
6 .....  
7 . LaTeX info: "xparse/define-command"  
8 .  
9 . Defining command \tablenum with sig. 'om' on line 7332.  
10 .....  
11 .....  
12 . LaTeX info: "xparse/define-command"  
13 .  
14 . Defining command \si with sig. 'om' on line 7344.  
15 .....  
16 .....  
17 . LaTeX info: "xparse/define-command"  
18 .  
19 . Defining command \__siunitx_bookmark_num:w with sig. 'om' on line 7391.  
20 .....  
21 .....  
22 .....  
23 . LaTeX info: "xparse/define-command"  
24 .  
25 . Defining command \__siunitx_bookmark_numrange:w with sig. 'omm' on line  
26 . 7393.  
27 .....  
28 .....  
29 . LaTeX info: "xparse/define-command"  
30 .  
31 . Defining command \__siunitx_bookmark_SI:w with sig. 'omom' on line  
32 . 7395.  
33 .....  
34 .....  
35 .....  
36 . LaTeX info: "xparse/define-command"  
37 .  
38 . Defining command \__siunitx_bookmark_SIlist:w with sig. 'omm' on line  
39 . 7397.  
40 .....  
41 .....  
42 . LaTeX info: "xparse/define-command"  
43 .  
44 . Defining command \__siunitx_bookmark_SIrange:w with sig. 'ommm' on line  
45 . 7399.  
46 .....  
47 .....  
48 . LaTeX info: "xparse/define-command"  
49 .  
50 . Defining command \__siunitx_bookmark_si:w with sig. 'om' on line 7400.  
51 .....  
52 \g_file_internal_ior=\read1  
53 (c:/TeXLive/2015/texmf-dist/tex/latex/beamer/translator/translator.sty  
54 Package: translator 2010/06/12 ver 1.10  
55  
56 (c:/TeXLive/2015/texmf-dist/tex/latex/beamer/translator/translator-  
57 language-map  
58 pings.tex))) (./main.aux)  
59 \openout1 = `main.aux'.  
60  
61  
62  
63  
64  
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```

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2
3
4
5     LaTeX Font Info:    Checking defaults for OML/cmm/m/it on input line 51.
6     LaTeX Font Info:    ... okay on input line 51.
7     LaTeX Font Info:    Checking defaults for T1/cmr/m/n on input line 51.
8     LaTeX Font Info:    ... okay on input line 51.
9     LaTeX Font Info:    Checking defaults for OT1/cmr/m/n on input line 51.
10    LaTeX Font Info:    ... okay on input line 51.
11    LaTeX Font Info:    Checking defaults for OMS/cmsy/m/n on input line 51.
12    LaTeX Font Info:    ... okay on input line 51.
13    LaTeX Font Info:    Checking defaults for OMX/cmex/m/n on input line 51.
14    LaTeX Font Info:    ... okay on input line 51.
15    LaTeX Font Info:    Checking defaults for U/cmr/m/n on input line 51.
16    LaTeX Font Info:    ... okay on input line 51.
17    LaTeX Font Info:    Checking defaults for TS1/cmr/m/n on input line 51.
18    LaTeX Font Info:    Try loading font information for TS1+cmr on input
19    line 51.
20
21 (c:/TeXLive/2015/texmf-dist/tex/latex/base/ts1cmr.fd
22 File: ts1cmr.fd 2014/09/29 v2.5h Standard LaTeX font definitions
23 )
24     LaTeX Font Info:    ... okay on input line 51.
25     LaTeX Font Info:    Checking defaults for PD1/pdf/m/n on input line 51.
26     LaTeX Font Info:    ... okay on input line 51.
27     LaTeX Font Info:    Try loading font information for T1+Merriweather-OsF
28 on inp
29 ut line 51.
30 (c:/TeXLive/2015/texmf-dist/tex/latex/merriweather/t1merriweather-osf.fd
31 File: T1Merriweather-OsF.fd 2014/01/22 (autoinst) Font definitions for
32 T1/Merri
33 weather-OsF.
34 )
35     LaTeX Font Info:    Font shape `T1/Merriweather-OsF/m/n' will be
36 (Font)                  scaled to size 7.5pt on input line 51.
37     LaTeX Info: Redefining \microtypecontext on input line 51.
38 Package microtype Info: Generating PDF output.
39 Package microtype Info: Character protrusion enabled (level 2).
40 Package microtype Info: Using default protrusion set `alltext'.
41 Package microtype Info: Automatic font expansion enabled (level 2),
42 (microtype)              stretch: 20, shrink: 20, step: 1, non-selected.
43 Package microtype Info: Using default expansion set `basictext'.
44 Package microtype Info: No adjustment of tracking.
45 Package microtype Info: No adjustment of interword spacing.
46 Package microtype Info: No adjustment of character kerning.
47 Package microtype Info: Loading generic settings for font family
48 (microtype)              `Merriweather-OsF' (encoding: T1).
49 (microtype)
50 (microtype)              For optimal results, create family-specific
51 settings.
52 (microtype)              See the microtype manual for details.
53 LaTeX Font Info:    Redeclaring symbol font `operators' on input line 51.
54 LaTeX Font Info:    Encoding `OT1' has changed to `T1' for symbol font
55 (Font)                  `operators' in the math version `normal' on input
56 line 51.
57 LaTeX Font Info:    Overwriting symbol font `operators' in version
58 `normal'
59
60
61
62
63
64
65
```

```
1  
2  
3  
4 (Font) OT1/cmr/m/n --> T1/Merriweather-OsF/m/n on input  
5 line 5  
6 1.  
7 LaTeX Font Info: Encoding `OT1' has changed to `T1' for symbol font  
8 (Font) `operators' in the math version `bold' on input line  
9 51.  
10 LaTeX Font Info: Overwriting symbol font `operators' in version `bold'  
11 (Font) OT1/cmr/bx/n --> T1/Merriweather-OsF/m/n on input  
12 line  
13 51.  
14 LaTeX Font Info: Overwriting symbol font `operators' in version `bold'  
15 (Font) T1/Merriweather-OsF/m/n --> T1/Merriweather-  
16 OsF/bx/n on  
17 input line 51.  
18 LaTeX Font Info: Redeclaring math alphabet \mathbf on input line 51.  
19 LaTeX Font Info: Overwriting math alphabet `\mathbf' in version  
20 `normal'  
21 (Font) OT1/cmr/bx/n --> T1/Merriweather-OsF/bx/n on  
22 input line  
23 51.  
24 LaTeX Font Info: Overwriting math alphabet `\mathbf' in version `bold'  
25 (Font) OT1/cmr/bx/n --> T1/Merriweather-OsF/bx/n on  
26 input line  
27 51.  
28 LaTeX Font Info: Redeclaring math alphabet \mathsf on input line 51.  
29 LaTeX Font Info: Overwriting math alphabet `\mathsf' in version  
30 `normal'  
31 (Font) OT1/cmss/m/n --> T1/MerriweatherSans-TLF/m/n on  
32 input l  
33 ine 51.  
34 LaTeX Font Info: Overwriting math alphabet `\mathsf' in version `bold'  
35 (Font) OT1/cmss/bx/n --> T1/MerriweatherSans-TLF/m/n on  
36 input  
37 line 51.  
38 LaTeX Font Info: Redeclaring math alphabet \mathit on input line 51.  
39 LaTeX Font Info: Overwriting math alphabet `\mathit' in version  
40 `normal'  
41 (Font) OT1/cmr/m/it --> T1/Merriweather-OsF/m/it on  
42 input line  
43 51.  
44 LaTeX Font Info: Overwriting math alphabet `\mathit' in version `bold'  
45 (Font) OT1/cmr/bx/it --> T1/Merriweather-OsF/m/it on  
46 input lin  
47 e 51.  
48 LaTeX Font Info: Redeclaring math alphabet \mathtt on input line 51.  
49 LaTeX Font Info: Overwriting math alphabet `\mathtt' in version  
50 `normal'  
51 (Font) OT1/cmtt/m/n --> T1/lmtt/m/n on input line 51.  
52 LaTeX Font Info: Overwriting math alphabet `\mathtt' in version `bold'  
53 (Font) OT1/cmtt/m/n --> T1/lmtt/m/n on input line 51.  
54 LaTeX Font Info: Overwriting math alphabet `\mathsf' in version `bold'  
55 (Font) T1/MerriweatherSans-TLF/m/n -->  
56 /bx/n on input line 51.  
57  
58  
59  
60  
61  
62  
63  
64  
65
```

```
1
2
3
4  LaTeX Font Info: Overwriting math alphabet `\\mathit' in version `bold'
5  (Font)                  T1/Merriweather-OsF/m/it --> T1/Merriweather-
6  OsF/bx/it
7  on input line 51.
8  \\c@mv@tabular=\\count180
9  \\c@mv@boldtabular=\\count181
10 ABD: EverySelectfont initializing macros
11 LaTeX Info: Redefining \\selectfont on input line 51.
12 (c:/TeXLive/2015/texmf-dist/tex/context/base/supp-pdf.mkii
13 [Loading MPS to PDF converter (version 2006.09.02).]
14 \\scratchcounter=\\count182
15 \\scratchdimen=\\dimen262
16 \\scratchbox=\\box60
17 \\nofMPsegments=\\count183
18 \\nofMParguments=\\count184
19 \\everyMPshowfont=\\toks36
20 \\MPscratchCnt=\\count185
21 \\MPscratchDim=\\dimen263
22 \\MPnumerator=\\count186
23 \\makeMPintoPDFobject=\\count187
24 \\everyMPtoPDFconversion=\\toks37
25 ) (c:/TeXLive/2015/texmf-dist/tex/latex/oberdiek/epstopdf-base.sty
26 Package: epstopdf-base 2010/02/09 v2.5 Base part for package epstopdf
27 (c:/TeXLive/2015/texmf-dist/tex/latex/oberdiek/grfext.sty
28 Package: grfext 2010/08/19 v1.1 Manage graphics extensions (HO)
29 )
30 )
31 Package grfext Info: Graphics extension search list:
32 (grfext)
33 [.png,.pdf,.jpg,.mps,.jpeg,.jbig2,.jb2,.PNG,.PDF,.JPG,.JPE
34 G,.JBIG2,.JB2,.eps]
35 (grfext)          \\AppendGraphicsExtensions on input line 452.
36 (c:/TeXLive/2015/texmf-dist/tex/latex/latexconfig/epstopdf-sys.cfg
37 File: epstopdf-sys.cfg 2010/07/13 v1.3 Configuration of (r)epstopdf for
38 TeX Liv
39 e
40 ))
41 )
42 Package lastpage Info: Please have a look at the pageslts package at
43 (lastpage)           https://www.ctan.org/pkg/pageslts
44 (lastpage)           ! on input line 51.
45 ABD: EveryShipout initializing macros
46 \\AtBeginShipoutBox=\\box61
47 *geometry* driver: auto-detecting
48 *geometry* detected driver: pdftex
49 *geometry* verbose mode - [ preamble ] result:
50 * driver: pdftex
51 * paper: a4paper
52 * layout: <same size as paper>
53 * layoutoffset:(h,v)=(0.0pt,0.0pt)
54 * modes: includefoot twoside
55 * h-part:(L,W,R)=(54.64pt, 488.22787pt, 54.64pt)
56 * v-part:(T,H,B)=(66.0pt, 745.04684pt, 34.0pt)
57 * \\paperwidth=597.50787pt
58 * \\paperheight=845.04684pt
59 * \\textwidth=488.22787pt
60
61
62
63
64
65
```

```
1
2
3
4      * \textheight=715.04684pt
5      * \oddsidemargin=-17.62999pt
6      * \evensidemargin=-17.62999pt
7      * \topmargin=-47.76999pt
8      * \headheight=17.5pt
9      * \headsep=24.0pt
10     * \topskip=10.0pt
11     * \footskip=30.0pt
12     * \marginparwidth=48.0pt
13     * \marginparsep=10.0pt
14     * \columnsep=18.0pt
15     * \skip\footins=22.0pt plus 2.0pt
16     * \hoffset=0.0pt
17     * \voffset=0.0pt
18     * \mag=1000
19     * \@twocolumntrue
20     * \@twosidetrue
21     * \@mparswitchtrue
22     * \@reversemarginfalse
23     * (1in=72.27pt=25.4mm, 1cm=28.453pt)
24
25
26 Package hyperref Info: Link coloring ON on input line 51.
27 (c:/TeXLive/2015/texmf-dist/tex/latex/hyperref/nameref.sty
28 Package: nameref 2012/10/27 v2.43 Cross-referencing by name of section
29 (c:/TeXLive/2015/texmf-dist/tex/generic/oberdiek/gettitlestring.sty
30 Package: gettitlestring 2010/12/03 v1.4 Cleanup title references (HO)
31 )
32 \c@section@level=\count188
33 )
34
35 LaTeX Info: Redefining \ref on input line 51.
36 LaTeX Info: Redefining \pageref on input line 51.
37 LaTeX Info: Redefining \nameref on input line 51.
38 (./main.out) (./main.out)
39 \@outlinefile=\write3
40 \openout3 = `main.out'.
41
42 \@gscitedetails=\box62
43 \@gscitedetailsheight=\skip166
44 \@gsheadbox=\box63
45 \@gsheadboxheight=\skip167
46 LaTeX Font Info:    Font shape `T1/Merriweather-OsF/b/n' will be
47 (Font)               scaled to size 6.5pt on input line 51.
48 LaTeX Font Info:    Calculating math sizes for size <7.5> on input line
49 51.
50 LaTeX Font Info:    Font shape `T1/Merriweather-OsF/m/n' will be
51 (Font)               scaled to size 6.24973pt on input line 51.
52 LaTeX Font Info:    Font shape `T1/Merriweather-OsF/m/n' will be
53 (Font)               scaled to size 5.24997pt on input line 51.
54 LaTeX Font Info:    Try loading font information for U+eur on input line
55 51.
56 (c:/TeXLive/2015/texmf-dist/tex/latex/amsfonts/ueur.fd
57 File: ueur.fd 2013/01/14 v3.01 Euler Roman
58 ) (c:/TeXLive/2015/texmf-dist/tex/latex/microtype/mt-eur.cfg
59
60
61
62
63
64
65
```

```
1  
2  
3  
4     File: mt-eur.cfg 2006/07/31 v1.1 microtype config. file: AMS Euler Roman  
5     (RS)  
6     )  
7  
8     LaTeX Font Warning: Font shape `OMS/cmsy/m/n' in size <7.5> not available  
9             (Font)                                size <7> substituted on input line 51.  
10  
11    LaTeX Font Info: External font `cmex10' loaded for size  
12        (Font)                                <7.5> on input line 51.  
13    LaTeX Font Info: External font `cmex10' loaded for size  
14        (Font)                                <6.24973> on input line 51.  
15    LaTeX Font Info: External font `cmex10' loaded for size  
16        (Font)                                <5.24997> on input line 51.  
17    LaTeX Font Info: Try loading font information for U+euf on input line  
18        51.  
19        (c:/TeXLive/2015/texmf-dist/tex/latex/amssfonts/ueuf.fd  
20    File: ueuf.fd 2013/01/14 v3.01 Euler Fraktur  
21    ) (c:/TeXLive/2015/texmf-dist/tex/latex/microtype/mt-euf.cfg  
22    File: mt-euf.cfg 2006/07/03 v1.1 microtype config. file: AMS Euler  
23        Fraktur (RS)  
24  
25    )  
26    LaTeX Font Info: Try loading font information for U+eus on input line  
27        51.  
28        (c:/TeXLive/2015/texmf-dist/tex/latex/amssfonts/ueus.fd  
29    File: ueus.fd 2013/01/14 v3.01 Euler Script  
30    ) (c:/TeXLive/2015/texmf-dist/tex/latex/microtype/mt-eus.cfg  
31    File: mt-eus.cfg 2006/07/28 v1.2 microtype config. file: AMS Euler Script  
32        (RS)  
33    )  
34    LaTeX Font Info: Try loading font information for U+euex on input line  
35        51.  
36        (c:/TeXLive/2015/texmf-dist/tex/latex/amssfonts/ueuex.fd  
37    File: ueuex.fd 2013/01/14 v3.01 Euler extra symbols  
38    )  
39  
40    LaTeX Font Warning: Font shape `OML/cmm/m/it' in size <7.5> not available  
41        (Font)                                size <7> substituted on input line 51.  
42  
43    LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/it' will be  
44        (Font)                                scaled to size 7.5pt on input line 51.  
45    LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/it' will be  
46        (Font)                                scaled to size 6.24973pt on input line 51.  
47    LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/it' will be  
48        (Font)                                scaled to size 5.24997pt on input line 51.  
49    LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/n' will be  
50        (Font)                                scaled to size 8.0pt on input line 51.  
51    LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/it' will be  
52        (Font)                                scaled to size 8.0pt on input line 51.  
53    LaTeX Font Info: Font shape `T1/Merriweather-OsF/b/it' will be  
54        (Font)                                scaled to size 8.0pt on input line 51.  
55    LaTeX Font Info: Package caption Info: Begin \AtBeginDocument code.  
56    LaTeX Font Info: Package caption Info: End \AtBeginDocument code.  
57  
58  
59  
60  
61  
62  
63  
64  
65
```

```
1  
2  
3  
4 (c:/TeXLive/2015/texmf-dist/tex/latex/beamer/translator/dicts/translator-  
5 basic-  
6 dictionary/translator-basic-dictionary-English.dict  
7 Dictionary: translator-basic-dictionary, Language: English  
8 ) (c:/TeXLive/2015/texmf-dist/tex/latex/siunitx/siunitx-abbreviations.cfg  
9 File: siunitx-abbreviations.cfg 2016/03/01 v2.6q siunitx: Abbreviated  
10 units  
11 )  
12 \c_siunitx_mathsf_int=\count189  
13 LaTeX Font Info: Try loading font information for T1+MerriweatherSans-  
14 TLF on  
15 input line 51.  
16 (c:/TeXLive/2015/texmf-dist/tex/latex/merriweather/t1merriweathersans-  
17 tlf.fd  
18 File: T1MerriweatherSans-TLF.fd 2014/01/22 (autoinst) Font definitions  
19 for T1/M  
20 erriweatherSans-TLF.  
21 )  
22 LaTeX Font Info: Font shape `T1/MerriweatherSans-TLF/m/n' will be  
23 (Font) scaled to size 7.5pt on input line 51.  
24 Package microtype Info: Loading generic settings for font family  
25 (microtype) `MerriweatherSans-TLF' (encoding: T1).  
26 (microtype) For optimal results, create family-specific  
27 settings.  
28 (microtype) See the microtype manual for details.  
29 LaTeX Font Info: Font shape `T1/MerriweatherSans-TLF/m/n' will be  
30 (Font) scaled to size 6.24973pt on input line 51.  
31 LaTeX Font Info: Font shape `T1/MerriweatherSans-TLF/m/n' will be  
32 (Font) scaled to size 5.24997pt on input line 51.  
33 \c_siunitx_mathtt_int=\count190  
34 LaTeX Font Info: Try loading font information for T1+lmtt on input  
35 line 51.  
36 (c:/TeXLive/2015/texmf-dist/tex/latex/lm/t1lmtt.fd  
37 File: t1lmtt.fd 2009/10/30 v1.6 Font defs for Latin Modern  
38 )  
39 Package microtype Info: Loading generic settings for font family  
40 (microtype) `lmtt' (encoding: T1).  
41 (microtype) For optimal results, create family-specific  
42 settings.  
43 (microtype) See the microtype manual for details.  
44 TextBlockOrigin set to 4pc+6.64pt x 4pc+6pt  
45 ! Undefined control sequence.  
46 <argument> \@ouplogo  
47  
48 1.63 \end{frontmatter}  
49  
50 The control sequence at the end of the top line  
51 of your error message was never \def'ed. If you have  
52 misspelled it (e.g., `hobx'), type `I' and the correct  
53 spelling (e.g., `I\hbox'). Otherwise just continue,  
54 and I'll forget about whatever was undefined.  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65
```

```
1
2
3
4 LaTeX Warning: Command \textasciiaacute invalid in math mode on input line
5 63.
6
7 LaTeX Font Info: Try loading font information for TS1+Merriweather-OsF
8 on in
9 put line 63.
10 (c:/TeXLive/2015/texmf-dist/tex/latex/merriweather/ts1merriweather-osf.fd
11 File: TS1Merriweather-OsF.fd 2014/01/22 (autoinst) Font definitions for
12 TS1/Mer
13 riweather-OsF.
14 )
15 LaTeX Font Info: Font shape `TS1/Merriweather-OsF/m/n' will be
16 (Font) scaled to size 7.5pt on input line 63.
17 Package microtype Info: Loading generic settings for font family
18 (microtype) `Merriweather-OsF' (encoding: TS1).
19 (microtype) For optimal results, create family-specific
20 settings.
21 (microtype) See the microtype manual for details.
22
23 LaTeX Warning: Command \textasciiaacute invalid in math mode on input line
24 63.
25
26
27 ! Extra }, or forgotten $.
28 \TP@commonendtextblock ...oxrulesize }\fi \egroup
29 \TP@prevdepth
30 =\prevdepth ...
31 1.63 \end{frontmatter}
32
33 I've deleted a group-closing symbol because it seems to be
34 spurious, as in `\$x} \$'. But perhaps the } is legitimate and
35 you forgot something else, as in `\\hbox{\$x}'. In such cases
36 the way to recover is to insert both the forgotten and the
37 deleted material, e.g., by typing `I\$}'.
38
39 ! Improper \prevdepth.
40 \TP@commonendtextblock ...P@prevdepth =\prevdepth
41 \prevdepth =-1000pt
42 \expandafter...
43 1.63 \end{frontmatter}
44
45 You can refer to \\spacefactor only in horizontal mode;
46 you can refer to \\prevdepth only in vertical mode; and
47 neither of these is meaningful inside \\write. So
48 I'm forgetting what you said and using zero instead.
49
50
51 ! You can't use `\\prevdepth' in math mode.
52 \TP@commonendtextblock ... =\prevdepth \prevdepth
53 =-1000pt \expandafter
54 \TP@...
55 1.63 \end{frontmatter}
56
57 Sorry, but I'm not programmed to handle this case;
58 I'll just pretend that you didn't ask for it.
59 If you're in the wrong mode, you might be able to
60
61
62
63
64
65
```

```
1
2
3
4     return to the right one by typing `I}' or `I$' or `I\par'.
5
6     ! Missing $ inserted.
7     <inserted text>
8         $
9     1.63 \end{frontmatter}
10
11    I've inserted something that you may have forgotten.
12    (See the <inserted text> above.)
13    With luck, this will get me unwedged. But if you
14    really didn't forget anything, try typing `2' now; then
15    my insertion and my current dilemma will both disappear.
16
17    ! Missing } inserted.
18    <inserted text>
19        }
20    1.63 \end{frontmatter}
21
22    I've inserted something that you may have forgotten.
23    (See the <inserted text> above.)
24    With luck, this will get me unwedged. But if you
25    really didn't forget anything, try typing `2' now; then
26    my insertion and my current dilemma will both disappear.
27
28
29
30    Overfull \hbox (54.64pt too wide) in paragraph at lines 63--63
31    []
32    []
33
34    LaTeX Font Info:    Font shape `T1/Merriweather-OsF/m/n' will be
35    (Font)              scaled to size 14.0pt on input line 63.
36    LaTeX Font Info:    Font shape `T1/Merriweather-OsF/m/n' will be
37    (Font)              scaled to size 8.99997pt on input line 63.
38    LaTeX Font Info:    Font shape `T1/Merriweather-OsF/b/n' will be
39    (Font)              scaled to size 18.0pt on input line 63.
40    LaTeX Font Info:    Font shape `T1/Merriweather-OsF/m/n' will be
41    (Font)              scaled to size 13.0pt on input line 63.
42    LaTeX Font Info:    Calculating math sizes for size <13> on input line
43    63.
44    LaTeX Font Info:    Font shape `T1/Merriweather-OsF/m/n' will be
45    (Font)              scaled to size 10.83287pt on input line 63.
46    LaTeX Font Info:    Font shape `T1/Merriweather-OsF/m/n' will be
47    (Font)              scaled to size 9.09996pt on input line 63.
48
49
50    LaTeX Font Warning: Font shape `OMS/cmsy/m/n' in size <13> not available
51    (Font)              size <12> substituted on input line 63.
52
53    LaTeX Font Info:    External font `cmex10' loaded for size
54    (Font)              <13> on input line 63.
55    LaTeX Font Info:    External font `cmex10' loaded for size
56    (Font)              <10.83287> on input line 63.
57    LaTeX Font Info:    External font `cmex10' loaded for size
58    (Font)              <9.09996> on input line 63.
59
60
61
62
63
64
65
```

1
2
3
4 LaTeX Font Warning: Font shape `OML/cmm/m/it' in size <13> not available
5 (Font) size <12> substituted on input line 63.
6
7 LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/it' will be
8 (Font) scaled to size 13.0pt on input line 63.
9 LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/it' will be
10 (Font) scaled to size 10.83287pt on input line 63.
11 LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/it' will be
12 (Font) scaled to size 9.09996pt on input line 63.
13 LaTeX Font Info: Font shape `T1/MerriweatherSans-TLF/m/n' will be
14 (Font) scaled to size 13.0pt on input line 63.
15 LaTeX Font Info: Font shape `T1/MerriweatherSans-TLF/m/n' will be
16 (Font) scaled to size 10.83287pt on input line 63.
17 LaTeX Font Info: Font shape `T1/MerriweatherSans-TLF/m/n' will be
18 (Font) scaled to size 9.09996pt on input line 63.
19 LaTeX Font Info: Font shape `TS1/Merriweather-OsF/m/n' will be
20 (Font) scaled to size 10.83287pt on input line 63.
21 LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/n' will be
22 (Font) scaled to size 9.0pt on input line 63.
23 LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/n' will be
24 (Font) scaled to size 7.0pt on input line 63.
25 LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/n' will be
26 (Font) scaled to size 5.0pt on input line 63.
27 LaTeX Font Info: External font `cmex10' loaded for size
28 (Font) <9> on input line 63.
29 LaTeX Font Info: External font `cmex10' loaded for size
30 (Font) <7> on input line 63.
31 LaTeX Font Info: External font `cmex10' loaded for size
32 (Font) <5> on input line 63.
33 LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/it' will be
34 (Font) scaled to size 9.0pt on input line 63.
35 LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/it' will be
36 (Font) scaled to size 7.0pt on input line 63.
37 LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/it' will be
38 (Font) scaled to size 5.0pt on input line 63.
39 LaTeX Font Info: Font shape `T1/MerriweatherSans-TLF/m/n' will be
40 (Font) scaled to size 9.0pt on input line 63.
41 LaTeX Font Info: Font shape `T1/MerriweatherSans-TLF/m/n' will be
42 (Font) scaled to size 7.0pt on input line 63.
43 LaTeX Font Info: Font shape `T1/MerriweatherSans-TLF/m/n' will be
44 (Font) scaled to size 5.0pt on input line 63.
45 LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/n' will be
46 (Font) scaled to size 6.5pt on input line 63.
47 LaTeX Font Info: Calculating math sizes for size <6.5> on input line
48 (Font) 63.
49 LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/n' will be
50 (Font) scaled to size 5.41643pt on input line 63.
51 LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/n' will be
52 (Font) scaled to size 4.54997pt on input line 63.
53
54 LaTeX Font Warning: Font shape `OMS/cmsy/m/n' in size <6.5> not available
55 (Font) size <6> substituted on input line 63.
56
57
58
59
60
61
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1
2
3
4 LaTeX Font Warning: Font shape `OMS/cmsy/m/n' in size <5.41643> not
5 available
6 (Font) size <5> substituted on input line 63.
7
8
9 LaTeX Font Warning: Font shape `OMS/cmsy/m/n' in size <4.54997> not
10 available
11 (Font) size <5> substituted on input line 63.
12
13 LaTeX Font Info: External font `cmex10' loaded for size
14 (Font) <6.5> on input line 63.
15 LaTeX Font Info: External font `cmex10' loaded for size
16 (Font) <5.41643> on input line 63.
17 LaTeX Font Info: External font `cmex10' loaded for size
18 (Font) <4.54997> on input line 63.
19
20 LaTeX Font Warning: Font shape `OML/cmm/m/it' in size <6.5> not available
21 (Font) size <6> substituted on input line 63.
22
23
24 LaTeX Font Warning: Font shape `OML/cmm/m/it' in size <5.41643> not
25 available
26 (Font) size <5> substituted on input line 63.
27
28
29
30 LaTeX Font Warning: Font shape `OML/cmm/m/it' in size <4.54997> not
31 available
32 (Font) size <5> substituted on input line 63.
33
34 LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/it' will be
35 (Font) scaled to size 6.5pt on input line 63.
36 LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/it' will be
37 (Font) scaled to size 5.41643pt on input line 63.
38 LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/it' will be
39 (Font) scaled to size 4.54997pt on input line 63.
40 LaTeX Font Info: Font shape `T1/MerriweatherSans-TLF/m/n' will be
41 (Font) scaled to size 6.5pt on input line 63.
42 LaTeX Font Info: Font shape `T1/MerriweatherSans-TLF/m/n' will be
43 (Font) scaled to size 5.41643pt on input line 63.
44 LaTeX Font Info: Font shape `T1/MerriweatherSans-TLF/m/n' will be
45 (Font) scaled to size 4.54997pt on input line 63.
46 LaTeX Font Info: Font shape `TS1/Merriweather-OsF/m/n' will be
47 (Font) scaled to size 5.41643pt on input line 63.
48
49
50 Overfull \hbox (54.64pt too wide) in paragraph at lines 63--63
51 [] [] []
52 []
53
54 LaTeX Font Info: Font shape `T1/Merriweather-OsF/b/n' will be
55 (Font) scaled to size 10.0pt on input line 63.
56 LaTeX Font Info: Font shape `T1/Merriweather-OsF/b/n' will be
57 (Font) scaled to size 8.0pt on input line 63.
58
59
60 Overfull \hbox (54.64pt too wide) in paragraph at lines 63--63
61
62
63
64
65

```
1
2
3
4  []
5  []
6
7  Package mdframed Info: mdframed works in twoside mode on input line 66.
8  LaTeX Font Info:    Font shape `T1/Merriweather-OsF/b/n' will be
9   (Font)          scaled to size 8.2pt on input line 66.
10  LaTeX Font Info:   Font shape `T1/Merriweather-OsF/b/n' will be
11   (Font)          scaled to size 7.5pt on input line 72.
12  Package mdframed Info: mdframed inside float
13    mdframed uses option nobreak mdframed on input line 79.
14  Package mdframed Info: mdframed inside a box
15    mdframed uses option nobreak mdframed on input line 79.
16
17
18  Package natbib Warning: Citation `Sandberg2014-dq' on page 1 undefined on
19  input
20    line 83.
21
22
23  Package natbib Warning: Citation `Zheng2017-zx' on page 1 undefined on
24  input li
25    ne 83.
26
27
28  Package natbib Warning: Citation `Rosenberg2018-aj' on page 1 undefined on
29  on inpu
30    t line 83.
31
32
33  Package natbib Warning: Citation `Wagner2016-ga' on page 1 undefined on
34  input l
35    ine 83.
36
37
38  Package natbib Warning: Citation `Regev2017-hc' on page 1 undefined on
39  input li
40    ne 83.
41
42
43  Package natbib Warning: Citation `Parekh2016-lk' on page 1 undefined on
44  input l
45    ine 84.
46
47
48  Package natbib Warning: Citation `Kivioja2012-cy' on page 1 undefined on
49  input
50    line 84.
51
52
53  Package natbib Warning: Citation `Ziegenhain2017-ww' on page 1 undefined on
54  on inp
55    ut line 84.
56
57
58
59
60
61
62
63
64
65
```

```
1
2
3
4 Package natbib Warning: Citation `Vieth2017-yl' on page 1 undefined on
5 input li
6 ne 84.
7
8
9 Package natbib Warning: Citation `Ziegenhain2018-qz' on page 1 undefined
10 on inp
11 ut line 85.
12
13
14 Package natbib Warning: Citation `Parekh2016-lk' on page 1 undefined on
15 input l
16 ine 85.
17
18
19 Package natbib Warning: Citation `Lake2016-ql' on page 1 undefined on
20 input lin
21 e 86.
22
23
24 Package natbib Warning: Citation `Habib2017-sn' on page 1 undefined on
25 input li
26 ne 86.
27
28
29
30 Package natbib Warning: Citation `Lake2016-ql' on page 1 undefined on
31 input lin
32 e 86.
33
34
35 Package natbib Warning: Citation `Macosko2015-yd' on page 1 undefined on
36 input
37 line 87.
38
39
40 Package natbib Warning: Citation `Svensson2017-gy' on page 1 undefined on
41 input
42 line 87.
43
44
45 Package natbib Warning: Citation `Hashimshony2016-nk' on page 1 undefined
46 on in
47 put line 87.
48
49
50
51 Package natbib Warning: Citation `Petukhov2017-ui' on page 1 undefined on
52 input
53 line 87.
54
55
56 Underfull \vbox (badness 10000) has occurred while \output is active []
57
58
59 Underfull \vbox (badness 10000) has occurred while \output is active []
60
61
62
63
64
65
```

```
1
2
3
4
5      LaTeX Font Info:    Font shape `T1/Merriweather-OsF/m/n' will be
6      (Font)           scaled to size 7.8pt on input line 88.
7      LaTeX Font Info:    Font shape `T1/Merriweather-OsF/b/n' will be
8      (Font)           scaled to size 7.8pt on input line 88.
9      [1{c:/TeXLive/2015/texmf-var/fonts/map/pdftex/updmap/pdftex.map}
10
11
12 ]
13      LaTeX Font Info:    Font shape `T1/Merriweather-OsF/b/n' will be
14      (Font)           scaled to size 8.5pt on input line 89.
15
16
17 Package natbib Warning: Citation `Soumillon2014-hd' on page 2 undefined
18 on inpu
19 t line 92.
20
21
22 Package natbib Warning: Citation `Jaitin2014-na' on page 2 undefined on
23 input l
24 ine 92.
25
26
27 Package natbib Warning: Citation `Macosko2015-yd' on page 2 undefined on
28 input
29 line 92.
30
31
32 Package natbib Warning: Citation `Hashimshony2016-nk' on page 2 undefined
33 on in
34 put line 92.
35
36
37 Package natbib Warning: Citation `Rosenberg2018-aj' on page 2 undefined
38 on inpu
39 t line 92.
40
41
42 Package natbib Warning: Citation `Zheng2017-zx' on page 2 undefined on
43 input li
44 ne 92.
45
46
47 Package natbib Warning: Citation `Habib2017-sn' on page 2 undefined on
48 input li
49 ne 92.
50
51
52 Package natbib Warning: Citation `Klein2015-mj' on page 2 undefined on
53 input li
54 ne 92.
55
56
57 Package natbib Warning: Citation `Zilionis2017-ox' on page 2 undefined on
58 input
59
60
61
62
63
64
65
```

```
1  
2  
3  
4     line 92.  
5  
6  
7 Package natbib Warning: Citation `Hochgerner2017-wt' on page 2 undefined  
8 on inp  
9 ut line 92.  
10  
11 LaTeX Font Info:    Font shape `T1/Merriweather-OsF/b/sl' in size <7.5>  
12 not ava  
13 ilable  
14 (Font)           Font shape `T1/Merriweather-OsF/b/it' tried instead  
15 on inpu  
16 t line 96.  
17 LaTeX Font Info:    Font shape `T1/Merriweather-OsF/b/it' will be  
18 (Font)           scaled to size 7.5pt on input line 96.  
19  
20 Package natbib Warning: Citation `Dobin2013-ha' on page 2 undefined on  
21 input li  
22 ne 100.  
23  
24  
25  
26 Package natbib Warning: Citation `Liao2014-pg' on page 2 undefined on  
27 input lin  
28 e 103.  
29  
30  
31 Package natbib Warning: Citation `data.table-xy' on page 2 undefined on  
32 input l  
33 ine 103.  
34  
35  
36 Package natbib Warning: Citation `Smith2017-xd' on page 2 undefined on  
37 input li  
38 ne 105.  
39  
40  
41 Package natbib Warning: Citation `Smith2017-xd' on page 2 undefined on  
42 input li  
43 ne 105.  
44  
45  
46 Package natbib Warning: Citation `Smith2017-xd' on page 2 undefined on  
47 input li  
48 ne 107.  
49  
50  
51  
52 Package natbib Warning: Citation `Macosko2015-yd' on page 2 undefined on  
53 input  
54 line 107.  
55  
56 ! Undefined control sequence.  
57 1.111 ...distribution using the R-package \texttt{  
58                                         {mclust}}  
59 \cite{Fraley2002-...}  
60  
61  
62  
63  
64  
65
```

1
2
3
4 The control sequence at the end of the top line
5 of your error message was never \def'ed. If you have
6 misspelled it (e.g., `\\hbox'), type `I' and the correct
7 spelling (e.g., `I\\hbox'). Otherwise just continue,
8 and I'll forget about whatever was undefined.
9
10
11 Package natbib Warning: Citation `Fraley2002-wc' on page 2 undefined on
12 input l
13 ine 111.
14
15
16 Package natbib Warning: Citation `Fraley2012-bb' on page 2 undefined on
17 input l
18 ine 111.
19
20
21 Package natbib Warning: Citation `Habib2017-sn' on page 2 undefined on
22 input li
23 ne 112.
24
25 LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/it' will be
26 (Font) scaled to size 7.8pt on input line 114.
27
28 Overfull \\hbox (253.11394pt too wide) has occurred while \\output is
29 active
30 [] []
31 []
32
33 [2]
34
35
36 Package natbib Warning: Citation `Vallejos2017-gp' on page 3 undefined on
37 input
38 line 117.
39
40
41 Package natbib Warning: Citation `Evans2017-hj' on page 3 undefined on
42 input li
43 ne 117.
44
45
46 Package natbib Warning: Citation `Grun2015-tk' on page 3 undefined on
47 input lin
48 e 117.
49
50
51
52 Package natbib Warning: Citation `Ziegenhain2017-ww' on page 3 undefined
53 on inp
54 ut line 119.
55
56
57 Package natbib Warning: Citation `Svensson2017-gy' on page 3 undefined on
58 input
59 line 119.
60
61
62
63
64
65

1
2
3
4
5
6 Package natbib Warning: Citation `Hendriks2014-lj' on page 3 undefined on
7 input
8 line 131.
9
10
11 Package natbib Warning: Citation `Gaidatzis2015-lx' on page 3 undefined
12 on inpu
13 t line 131.
14
15
16 Package natbib Warning: Citation `La_Manno2017-mu' on page 3 undefined on
17 input
18 line 131.
19
20
21 Package natbib Warning: Citation `Habib2017-sn' on page 3 undefined on
22 input li
23 ne 131.
24
25
26
27 Package natbib Warning: Citation `Lake2016-ql' on page 3 undefined on
28 input lin
29 e 132.
30
31
32 Package natbib Warning: Citation `Lake2017-dn' on page 3 undefined on
33 input lin
34 e 132.
35
36
37 Package natbib Warning: Citation `Satija2015-nn' on page 3 undefined on
38 input l
39 ine 132.
40
41
42 Package natbib Warning: Citation `Butler2017-kv' on page 3 undefined on
43 input l
44 ine 132.
45
46
47 Package natbib Warning: Citation `Tasic2016-ms' on page 3 undefined on
48 input li
49 ne 136.
50
51
52
53 Package natbib Warning: Citation `Tasic2016-ms' on page 3 undefined on
54 input li
55 ne 137.
56
57
58 Package natbib Warning: Citation `Vieth2017-yl' on page 3 undefined on
59 input li
60
61
62
63
64
65

1
2
3
4 ne 139.
5
6
7 Package natbib Warning: Citation `Habib2017-sn' on page 3 undefined on
8 input li
9 ne 139.
10
11
12 Package natbib Warning: Citation `The_Tabula_Muris_Consortium2018-wm' on
13 page 3
14 undefined on input line 139.
15
16
17 Package natbib Warning: Citation `Han2018-ce' on page 3 undefined on
18 input line
19 139.
20
21
22 Overfull \hbox (253.11394pt too wide) has occurred while \output is
23 active
24 [][]
25 []
26
27 [3]
28
29
30 Package natbib Warning: Citation `Bagnoli2017-ex' on page 4 undefined on
31 input
32 line 155.
33
34
35 Underfull \hbox (badness 3039) in paragraph at lines 153--156
36 \T1/Merriweather-OsF/m/n/7.5 Serum (Thermo Fisher) and 1 % Peni-
37 cillin/Streptom
38 ycin
39 []
40
41
42 Package natbib Warning: Citation `Zheng2017-zx' on page 4 undefined on
43 input li
44 ne 157.
45
46
47 Package natbib Warning: Citation `Habib2017-sn' on page 4 undefined on
48 input li
49 ne 159.
50
51
52 Package natbib Warning: Citation `noauthor_undated-nd' on page 4
53 undefined on i
54 nput line 159.
55
56
57
58 Package natbib Warning: Citation `Vieth2017-yl' on page 4 undefined on
59 input li
60
61
62
63
64
65

```
1  
2  
3  
4 ne 164.  
5  
6  
7 Package natbib Warning: Citation `Law2014-yx' on page 4 undefined on  
8 input line  
9 164.  
10  
11  
12 Package natbib Warning: Citation `Lun2016-qr' on page 4 undefined on  
13 input line  
14 164.  
15  
16  
17 Package natbib Warning: Citation `Soneson2018-ms' on page 4 undefined on  
18 input  
19 line 166.  
20  
21  
22 Package natbib Warning: Citation `Habib2017-sn' on page 4 undefined on  
23 input li  
24 ne 170.  
25  
26  
27  
28 Package natbib Warning: Citation `Satija2015-nn' on page 4 undefined on  
29 input l  
30 ine 170.  
31  
32  
33 Package natbib Warning: Citation `Butler2017-kv' on page 4 undefined on  
34 input l  
35 ine 170.  
36  
37  
38 Package natbib Warning: Citation `Macosko2015-yd' on page 4 undefined on  
39 input  
40 line 174.  
41  
42  
43 Package natbib Warning: Citation `Smith2017-xd' on page 4 undefined on  
44 input li  
45 ne 174.  
46  
47  
48  
49 Overfull \hbox (253.11394pt too wide) has occurred while \output is  
50 active  
51 [][]  
52 []  
53  
54 [4]  
55  
56 Package natbib Warning: Citation `Parekh2018-db' on page 5 undefined on  
57 input l  
58 ine 192.  
59  
60  
61  
62  
63  
64  
65
```

```
1  
2  
3  
4  
5 Underfull \hbox (badness 10000) in paragraph at lines 197--201  
6  
7 []  
8  
9 No file main.bbl.  
10 Package epstopdf Info: Source file: <zUMI_pipeline.eps>  
11 (epstopdf) date: 2018-04-22 10:19:55  
12 (epstopdf) size: 10640774 bytes  
13 (epstopdf) Output file: <zUMI_pipeline-eps-converted-to.pdf>  
14 (epstopdf) date: 2018-04-22 10:20:17  
15 (epstopdf) size: 1667698 bytes  
16 (epstopdf) Command: <repstopdf --outfile=zUMI_pipeline-eps-  
17 converte  
18 d-to.pdf zUMI_pipeline.eps>  
19 (epstopdf) \includegraphics on input line 225.  
20 Package epstopdf Info: Output file is already up-to-date.  
21 <zUMI_pipeline-eps-converted-to.pdf, id=148, 2137.9875pt x 723.70375pt>  
22 File: zUMI_pipeline-eps-converted-to.pdf Graphic file (type pdf)  
23 <use zUMI_pipeline-eps-converted-to.pdf>  
24 Package pdftex.def Info: zUMI_pipeline-eps-converted-to.pdf used on input  
25 line  
26 225.  
27 (pdftex.def) Requested size: 463.81499pt x 156.99571pt.  
28 LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/n' will be  
29 (Font) scaled to size 6.0pt on input line 227.  
30 LaTeX Font Info: Font shape `T1/Merriweather-OsF/b/n' will be  
31 (Font) scaled to size 6.0pt on input line 227.  
32 LaTeX Font Info: Font shape `T1/Merriweather-OsF/m/it' will be  
33 (Font) scaled to size 6.0pt on input line 227.  
34 <figure2.pdf, id=149, 794.97pt x 614.295pt>  
35 File: figure2.pdf Graphic file (type pdf)  
36 <use figure2.pdf>  
37 Package pdftex.def Info: figure2.pdf used on input line 234.  
38 (pdftex.def) Requested size: 244.11394pt x 188.62979pt.  
39 <zUMIsFigure_utilities.pdf, id=150, 867.24pt x 476.96884pt>  
40 File: zUMIsFigure_utilities.pdf Graphic file (type pdf)  
41 <use zUMIsFigure_utilities.pdf>  
42 Package pdftex.def Info: zUMIsFigure_utilities.pdf used on input line  
43 242.  
44 (pdftex.def) Requested size: 439.4021pt x 241.66429pt.  
45 <figure4v3.pdf, id=151, 939.51pt x 505.89pt>  
46 File: figure4v3.pdf Graphic file (type pdf)  
47 <use figure4v3.pdf>  
48 Package pdftex.def Info: figure4v3.pdf used on input line 251.  
49 (pdftex.def) Requested size: 488.22787pt x 262.88676pt.  
50  
51 Package natbib Warning: Citation `Habib2017-sn' on page 5 undefined on  
52 input line 257.  
53  
54 Package natbib Warning: Citation `Satija2015-nn' on page 5 undefined on  
55 input line 1  
56  
57  
58 Package natbib Warning: Citation `Satija2015-nn' on page 5 undefined on  
59 input line 1  
60  
61  
62  
63  
64  
65
```

```
1  
2  
3  
4     ine 257.  
5  
6  
7     Package natbib Warning: Citation `Butler2017-kv' on page 5 undefined on  
8     input li  
9     ine 257.  
10  
11  
12     Package natbib Warning: Citation `Habib2017-sn' on page 5 undefined on  
13     input li  
14     ne 257.  
15  
16  
17     Package natbib Warning: Citation `Habib2017-sn' on page 5 undefined on  
18     input li  
19     ne 257.  
20  
21     LaTeX Font Info:    External font `cmex10' loaded for size  
22     (Font)                <6> on input line 257.  
23     LaTeX Font Info:    Font shape `T1/MerriweatherSans-TLF/m/n' will be  
24     (Font)                scaled to size 6.0pt on input line 257.  
25  
26  
27     Underfull \hbox (badness 10000) in paragraph at lines 279--279  
28     [] | \T1/Merriweather-OsF/m/n/7 Open  
29     []  
30  
31  
32     Underfull \hbox (badness 10000) in paragraph at lines 279--279  
33     [] | \T1/Merriweather-OsF/m/n/7 UMI col-  
34     []  
35  
36  
37     Underfull \hbox (badness 6775) in paragraph at lines 279--279  
38     [] | \T1/Merriweather-OsF/m/n/7 BC de-tec-  
39     []  
40  
41  
42     Underfull \hbox (badness 10000) in paragraph at lines 279--279  
43     [] | \T1/Merriweather-OsF/m/n/7 Down-  
44     []  
45  
46  
47  
48     Overfull \hbox (2.83214pt too wide) in paragraph at lines 279--279  
49     [] | \T1/Merriweather-OsF/m/n/7 Compatible  
50     []  
51  
52  
53     Underfull \hbox (badness 10000) in paragraph at lines 279--279  
54     \T1/Merriweather-OsF/m/n/7 UMI li-  
55     []  
56  
57  
58     Underfull \hbox (badness 10000) in paragraph at lines 279--279  
59     \T1/Merriweather-OsF/m/n/7 brary  
60  
61  
62  
63  
64  
65
```

1
2
3
4 []
5
6
7 Underfull \hbox (badness 10000) in paragraph at lines 279--279
8 [] |\T1/Merriweather-OsF/m/n/7 Cell
9 []
10
11
12 Package natbib Warning: Citation `Zheng2017-zx' on page 5 undefined on
13 input li
14 ne 279.
15
16
17 Underfull \hbox (badness 10000) in paragraph at lines 279--279
18 [] |\T1/Merriweather-OsF/m/n/7 Hamming
19 []
20
21
22 Package natbib Warning: Citation `Zheng2017-zx' on page 5 undefined on
23 input li
24 ne 279.
25
26
27 Package natbib Warning: Citation `Hashimshony2016-nk' on page 5 undefined
28 on in
29 put line 279.
30
31
32
33 Underfull \hbox (badness 10000) in paragraph at lines 279--279
34 [] |\T1/Merriweather-OsF/m/n/7 identity
35 []
36
37
38 Package natbib Warning: Citation `Grun2014-ez' on page 5 undefined on
39 input lin
40 e 279.
41
42
43 Package natbib Warning: Citation `Hashimshony2016-nk' on page 5 undefined
44 on in
45 put line 279.
46
47
48
49 Package natbib Warning: Citation `Petukhov2017-ui' on page 5 undefined on
50 input
51 line 279.
52
53
54 Underfull \hbox (badness 10000) in paragraph at lines 279--279
55 [] |\T1/Merriweather-OsF/m/n/7 TopHat2
56 []
57
58
59 Underfull \hbox (badness 10000) in paragraph at lines 279--279
60
61
62
63
64
65

1
2
3
4 []|\T1/Merriweather-OsF/m/n/7 WL,top-
5 []
6
7
8 Package natbib Warning: Citation `Macosko2015-yd' on page 5 undefined on
9 input
10 line 279.
11
12
13 Package natbib Warning: Citation `Klein2015-mj' on page 5 undefined on
14 input li
15 ne 279.
16
17
18 Package natbib Warning: Citation `Zheng2017-zx' on page 5 undefined on
19 input li
20 ne 279.
21
22
23
24 Underfull \hbox (badness 10000) in paragraph at lines 279--279
25 []|\T1/Merriweather-OsF/m/n/7 Drop-seq-
26 []
27
28
29 Package natbib Warning: Citation `Macosko2015-yd' on page 5 undefined on
30 input
31 line 279.
32
33
34 Underfull \hbox (badness 10000) in paragraph at lines 279--279
35 []|\T1/Merriweather-OsF/m/n/7 Hamming
36 []
37
38
39
40 Package natbib Warning: Citation `Macosko2015-yd' on page 5 undefined on
41 input
42 line 279.
43
44
45 Package natbib Warning: Citation `Soumillon2014-hd' on page 5 undefined
46 on inpu
47 t line 279.
48
49
50 Package natbib Warning: Citation `Hashimshony2016-nk' on page 5 undefined
51 on in
52 put line 279.
53
54
55 Package natbib Warning: Citation `Tian2017-eh' on page 5 undefined on
56 input lin
57 e 279.
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4 Underfull \hbox (badness 10000) in paragraph at lines 279--279
5 []|\T1/Merriweather-OsF/m/n/7 Hamming
6 []
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9 Package natbib Warning: Citation `Grun2014-ez' on page 5 undefined on
10 input lin
11 e 279.
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14 Package natbib Warning: Citation `Jaitin2014-na' on page 5 undefined on
15 input l
16 ine 279.
17
18
19 Package natbib Warning: Citation `Soumillon2014-hd' on page 5 undefined on
20 input
21 t line 279.
22
23
24 Package natbib Warning: Citation `Macosko2015-yd' on page 5 undefined on
25 input
26 line 279.
27
28
29
30 Package natbib Warning: Citation `Svensson2017-gy' on page 5 undefined on
31 input
32 line 279.
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34
35 Underfull \hbox (badness 10000) in paragraph at lines 279--279
36 []|\T1/Merriweather-OsF/m/n/7 WL,top-
37 []
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39
40 Package natbib Warning: Citation `Soumillon2014-hd' on page 5 undefined on
41 input
42 t line 279.
43
44
45 Package natbib Warning: Citation `Grun2014-ez' on page 5 undefined on
46 input lin
47 e 279.
48
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51 Package natbib Warning: Citation `Islam2014-kv' on page 5 undefined on
52 input li
53 ne 279.
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56 Package natbib Warning: Citation `Jaitin2014-na' on page 5 undefined on
57 input l
58 ine 279.
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5 Package natbib Warning: Citation `Macosko2015-yd' on page 5 undefined on
6 input
7 line 279.
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10 Package natbib Warning: Citation `Klein2015-mj' on page 5 undefined on
11 input li
12 ne 279.
13
14
15 Package natbib Warning: Citation `Zheng2017-zx' on page 5 undefined on
16 input li
17 ne 279.
18
19
20 Package natbib Warning: Citation `Smith2017-xd' on page 5 undefined on
21 input li
22 ne 279.
23
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25
26 Underfull \hbox (badness 10000) in paragraph at lines 279--279
27 []|\T1/Merriweather-OsF/m/n/7 network-
28 []
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31 Package natbib Warning: Citation `Soumillon2014-hd' on page 5 undefined
32 on inpu
33 t line 279.
34
35
36 Package natbib Warning: Citation `Klein2015-mj' on page 5 undefined on
37 input li
38 ne 279.
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41 Underfull \hbox (badness 10000) in paragraph at lines 279--279
42 []|\T1/Merriweather-OsF/m/n/7 Hamming
43 []
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46 Underfull \hbox (badness 10000) in paragraph at lines 279--279
47 []|\T1/Merriweather-OsF/m/n/7 A,WL,top-
48 []
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51
52 Package natbib Warning: Citation `Soumillon2014-hd' on page 5 undefined
53 on inpu
54 t line 279.
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56
57 Package natbib Warning: Citation `Grun2014-ez' on page 5 undefined on
58 input lin
59 e 279.
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6 Package natbib Warning: Citation `Islam2014-kv' on page 5 undefined on
7 input li
8 ne 279.
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11 Package natbib Warning: Citation `Jaitin2014-na' on page 5 undefined on
12 input l
13 ine 279.
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16 Package natbib Warning: Citation `Macosko2015-yd' on page 5 undefined on
17 input
18 line 279.
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21 Package natbib Warning: Citation `Hashimshony2016-nk' on page 5 undefined
22 on in
23 put line 279.
24
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26
27 Package natbib Warning: Citation `Hochgerner2017-wt' on page 5 undefined
28 on inp
29 ut line 279.
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31
32 Package natbib Warning: Citation `Habib2017-sn' on page 5 undefined on
33 input li
34 ne 279.
35
36
37 Package natbib Warning: Citation `Rosenberg2018-aj' on page 5 undefined on
38 on inpu
39 t line 279.
40
41
42 Package natbib Warning: Citation `Zheng2017-zx' on page 5 undefined on
43 input li
44 ne 279.
45
46
47 LaTeX Warning: `h' float specifier changed to `ht'.
48
49
50
51 AED: lastpage setting LastPage
52
53 Overfull \hbox (253.11394pt too wide) has occurred while \output is
54 active
55 [][]
56 []
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58 [5
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4 ]
5 Overfull \hbox (253.11394pt too wide) has occurred while \output is
6 active
7 []
8 []
9
10 [6 <./zUMI_pipeline-eps-converted-to.pdf> <./figure2.pdf>]
11 Overfull \hbox (253.11394pt too wide) has occurred while \output is
12 active
13 []
14 []
15 []
16
17 [7 <./zUMIsFigure_utilities.pdf>]
18 Overfull \hbox (253.11394pt too wide) has occurred while \output is
19 active
20 []
21 []
22
23 [8 <./figure4v3.pdf>]
24
25 Package natbib Warning: There were undefined citations.
26
27 Package atveryend Info: Empty hook `BeforeClearDocument' on input line
28 283.
29 Package atveryend Info: Empty hook `AfterLastShipout' on input line 283.
30 (./main.aux)
31 Package atveryend Info: Executing hook `AtVeryEndDocument' on input line
32 283.
33 Package atveryend Info: Executing hook `AtEndAfterFileList' on input line
34 283.
35 Package rerunfilecheck Info: File `main.out' has not changed.
36 (rerunfilecheck) Checksum:
37 2535D27E612411330F05046A086B7C4B;1574.
38
39
40 LaTeX Font Warning: Size substitutions with differences
41 (Font) up to 1.0pt have occurred.
42
43 )
44 Here is how much of TeX's memory you used:
45 24718 strings out of 493027
46 457134 string characters out of 6137679
47 620786 words of memory out of 5000000
48 27762 multiletter control sequences out of 15000+600000
49 68206 words of font info for 205 fonts, out of 8000000 for 9000
50 1141 hyphenation exceptions out of 8191
51 64i,12n,102p,10407b,865s stack positions out of
52 5000i,500n,10000p,200000b,80000s
53 {c:/TeXLive/2015/texmf-dist/fonts/enc/dvips/lm/lm-
54 ec.enc}{c:/TeXLive/2015/tex
55 mf-
56 dist/fonts/enc/dvips/merriweather/mwth_jnnjab.enc}{c:/TeXLive/2015/texmf-
57 dis
58 t/fonts/enc/dvips/merriweather/mwth_ywgpba.enc}<c:/TeXLive/2015/texmf-
59 dist/font
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4     s/type1/sorkin/merriweather/Merriweather-Bold.pfb><c:/TeXLive/2015/texmf-
5         dist/f
6     onts/type1/sorkin/merriweather/Merriweather-
7         BoldIt.pfb><c:/TeXLive/2015/texmf-d
8             ist/fonts/type1/sorkin/merriweather/Merriweather-
9                 Italic.pfb><c:/TeXLive/2015/te
10            xmf-dist/fonts/type1/sorkin/merriweather/Merriweather-
11                Regular.pfb><c:/TeXLive/2
12                    015/texmf-
13                dist/fonts/type1/public/amsfonts/cm/cmsy7.pfb><c:/TeXLive/2015/texmf-
14                    dist/fonts/type1/public/amsfonts/euler/eusm7.pfb><c:/TeXLive/2015/texmf-
15                        dist/fo
16                    nts/type1/public/lm/lmtt8.pfb>
17                    Output written on main.pdf (8 pages, 4895790 bytes).
18                    PDF statistics:
19                        301 PDF objects out of 1000 (max. 8388607)
20                        234 compressed objects within 3 object streams
21                        38 named destinations out of 1000 (max. 500000)
22                        51909 words of extra memory for PDF output out of 61914 (max. 10000000)
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