# Supplementary materials for "Speed-dependent and mode-dependent modulations of spatiotemporal modules in human locomotion extracted via tensor decomposition"

**Ken Takiyama[1]*, Hikaru Yokoyama[1, 2]*, Naotsugu Kaneko[3], Kimitaka Nakazawa[3]**

[1]Tokyo University of Agriculture and Technology, Department of Electrical Engineering and Computer Science, Nakacho, Koganei Tokyo, Japan

[2]Rehabilitation Engineering Laboratory, Toronto Rehabilitation Institute, University Health Network, Toronto, Ontario, Canada

[3]The University of Tokyo, Department of Life Sciences, Graduate School of Arts and Sciences, Tokyo, Japan

* ... equally contributed.

Correspondence should be addressed to K.T. (t.j.ken.takiyama@gmail.com).

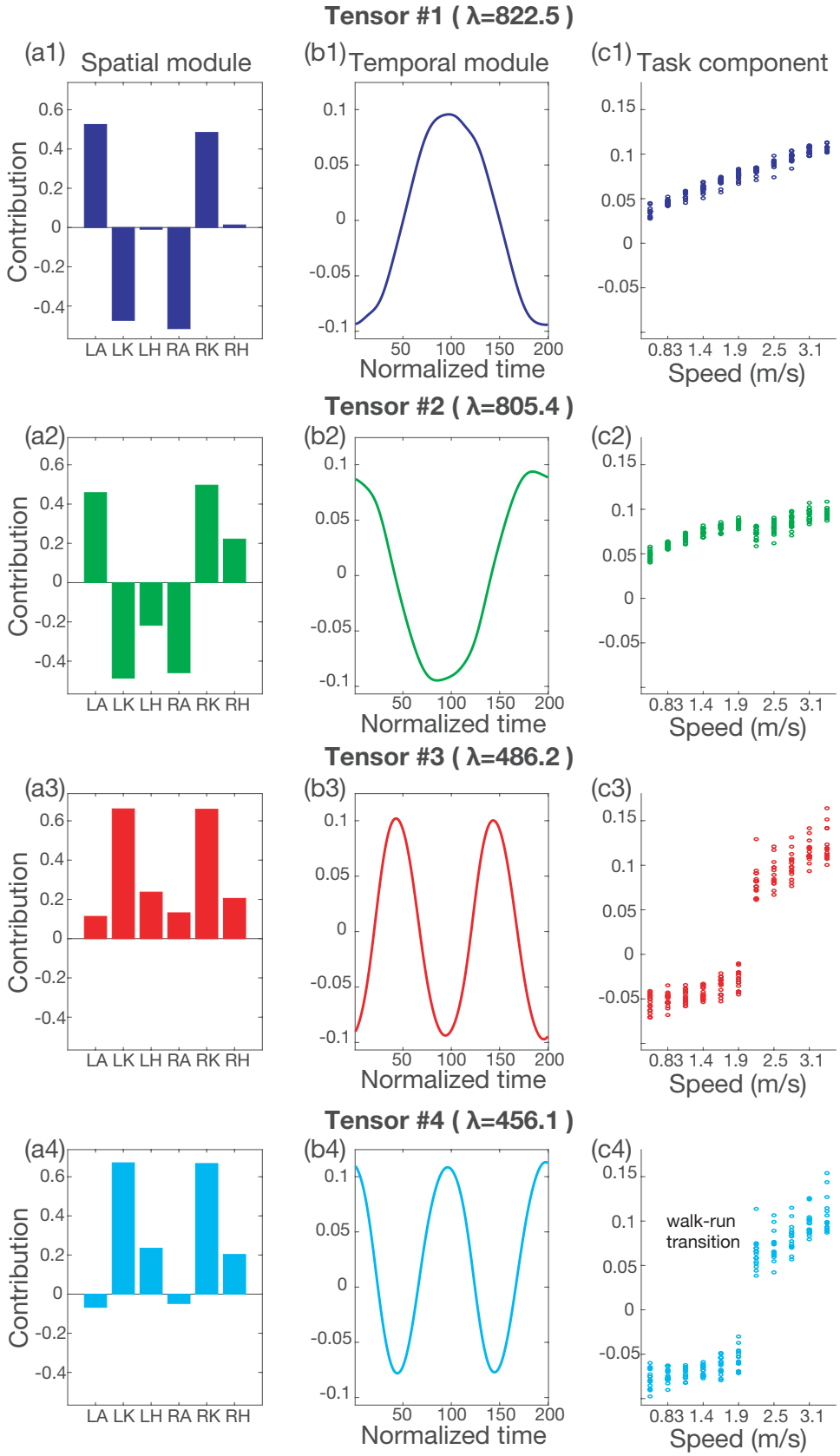


**Fig. S1** Tensor decomposition for joint angle data. The number of modules was determined based on 90% explained variance.

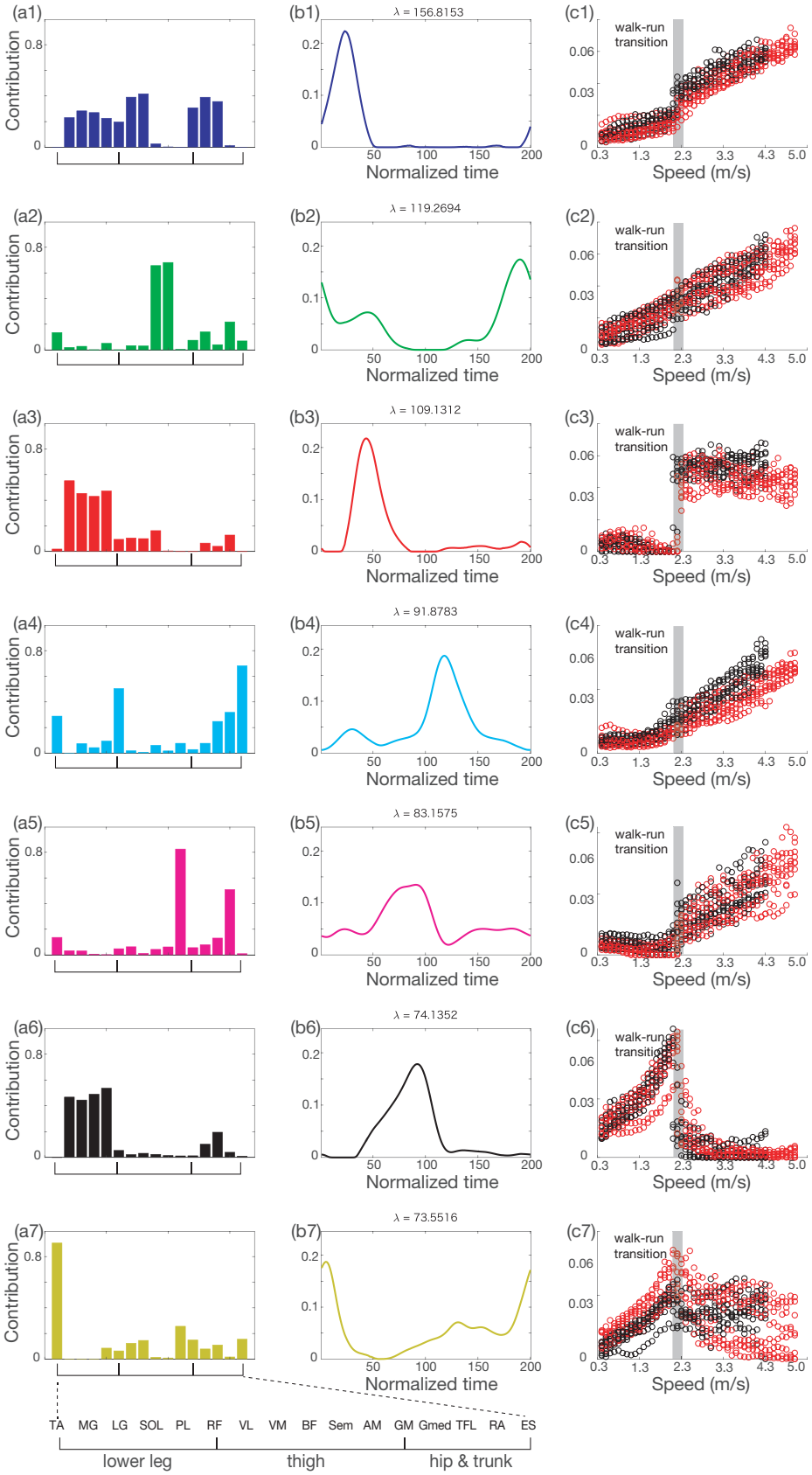


**Fig. S2** Tensor decomposition for EMG data. The number of modules was determined based on 75% explained variance.

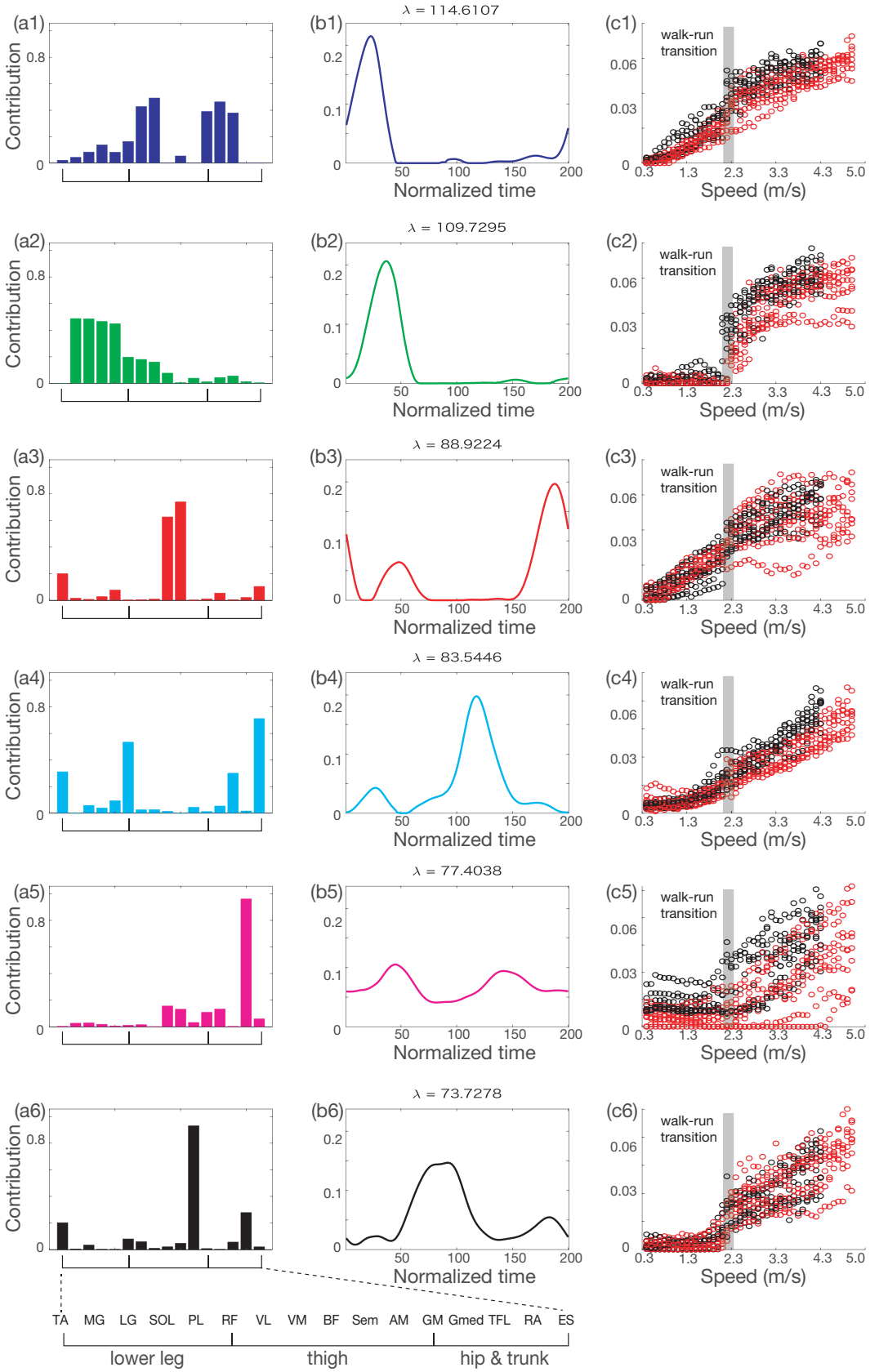


**Fig. S3** Tensor decomposition for EMG data. The number of modules was determined based on 80% explained variance. Tensors 1 to 6 are shown.

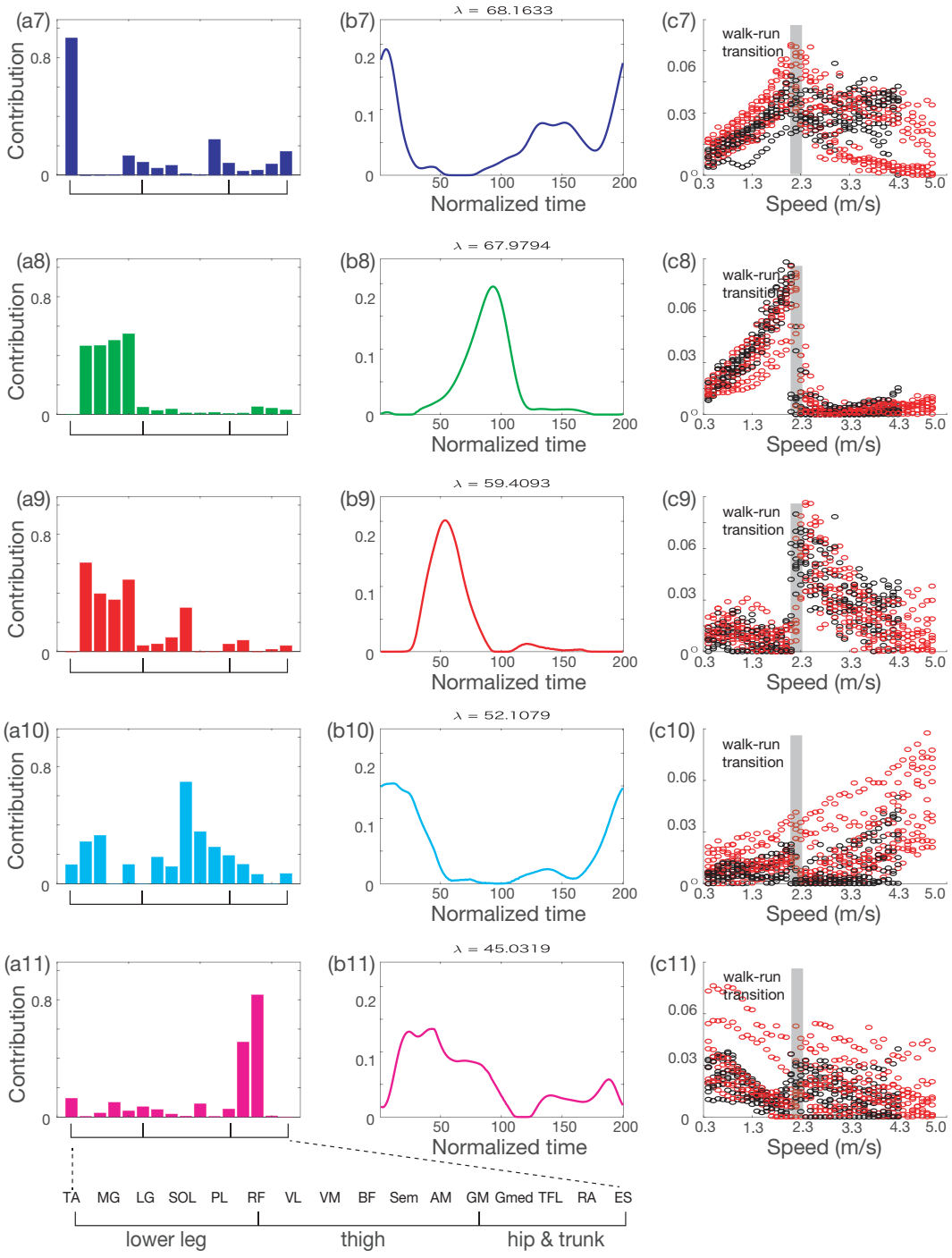


**Fig. S4** Tensor decomposition for EMG data. The number of modules was determined based on 80% explained variance. Tensors 7 to 11 are shown.