## Magnetoencephalographic Correlates of

## **Perceptual State During Auditory Bistability**

Robert D. Sanders<sup>1,2\*</sup>
Joel S. Winston<sup>1,3</sup>
Gareth R. Barnes<sup>3</sup>
Geraint Rees<sup>1,3</sup>

RDS and JSW contributed equally to this work.

- 1. Institute of Cognitive Neuroscience, University College London, Alexandra House, 17-19 Queen Square, London, WC1N 3AR, London, United Kingdom
- 2. Department of Anesthesiology, University of Wisconsin, Madison, USA
- 3. Wellcome Trust Centre for Neuroimaging, University College London, London, WC1N 3BG, United Kingdom

\*Correspondence to: Dr Robert D Sanders, Department of Anesthesiology, University of Wisconsin, Madison, USA. Email: robert.sanders@wisc.edu

## **Supplementary Table 1:** *Individual participant trial classification by analysis type.*

Cells show SVM classification rates for individual participants for each analysis expressed as mean across 100 iterations of 10-fold cross validation (95% confidence interval across iterations is in parentheses). Pink cells show classification rates at above chance level. The far right column (in grey) shows the median classification rate across participants. ROI = region of interest, rAC = right auditory cortex, IAC = left auditory cortex, rPIPS = right posterior inferior parietal sulcus.

Participant				S01	S02	S03	S04	S05	S06	S07	S08	S09	S10	S11	S12	S13	S14	Median
Number of trials				2476	2022	1996	1956	1952	2502	2246	2010	1746	1206	2188	2470	1814	2756	2016
Analysis	Sensor		Linear	51.2 (51.1-51.3)	53.9 (53.8-54.0)	<b>51.8</b> (51.6-51.9)	51.3 (51.2-51.4)	<b>54.4</b> (54.3-54.5)	55.5 (55.4-55.6)	53.6 (53.5-53.7)	50.1 (50.0-50.3)	51.6 (51.4-51.7)	53.4 (53.3-53.6)	<b>54.4</b> (54.3-54.5)	52.7 (52.6-52.8)	53.7 (53.6-53.8)	<b>56.3</b> (56.3-56.4)	53.6
			Nonlinear	<b>51.7</b> (51.6-51.9)	55.7 (55.6-55.8)	<b>52.4</b> (52.3-52.5)	53.2 (53.0-53.4)	55.2 (55.1-55.3)	56.7 (56.6-56.8)	<b>54.5</b> (54.4-54.6)	<b>52.8</b> (52.6-52.9)	52.0 (51.8-52.1)	53.6 (53.4-53.8)	<b>54.9</b> (54.8-55.0)	<b>52.7</b> (52.6-52.8)	53.9 (53.8-54.1)	56.7 (56.6-56.8)	53.8
	Source Linear Nonlinear		Linear	50.7 (50.6-50.8)	51.0 (50.8-51.1)	<b>52.6</b> (52.4-52.7)	<b>52.5</b> (52.4-52.6)	53.2 (53.0-53.3)	<b>54.2</b> (54.1-54.3)	<b>51.5</b> (51.4-51.6)	50.3 (50.2-50.5)	<b>56.1</b> (56.0-56.2)	<b>58.1</b> (57.9-58.2)	<b>53.1</b> (53.0-53.2)	<b>53.4</b> (53.3-53.5)	<b>51.7</b> (51.5-51.8)	52.3 (52.2-52.4)	52.6
			50.4 (50.2-50.5)	<b>55.2</b> (55.1-55.3)	<b>54.6</b> (54.5-54.7)	<b>52.9</b> (52.8-53.0)	<b>53.1</b> (53.0-53.3)	<b>54.3</b> (54.2-54.4)	<b>51.9</b> (51.8-52.0)	<b>53.3</b> (53.1-53.4)	<b>56.3</b> (56.2-56.4)	<b>58.1</b> (58.0-58.2)	<b>54.6</b> (54.5-54.7)	<b>53.6</b> (53.5-53.7)	<b>53.8</b> (53.7-53.9)	<b>52.6</b> (52.5-52.7)	53.7	
	ROI	rAC	Linear	<b>52.6</b> (52.5-52.7)	<b>55.3</b> (55.2-55.4)	<b>54.9</b> (54.8-54.9)	50.3 (50.2-50.4)	<b>57.1</b> (57.0-57.2)	<b>55.4</b> (55.3-55.4)	50.0 (49.9-50.2)	<b>51.5</b> (51.4-51.6)	58.4 (58.4-58.5)	<b>55.7</b> (55.6-55.8)	<b>53.1</b> (53.1-53.2)	<b>52.7</b> (52.6-52.8)	<b>53.4</b> (53.3-53.5)	<b>55.3</b> (55.3-55.4)	54.1
			Nonlinear	<b>52.7</b> (52.7-52.8)	<b>57.2</b> (57.1-57.2)	<b>54.8</b> (54.7-54.9)	50.9 (50.7-51.1)	<b>57.8</b> (57.7-57.8)	<b>56.4</b> (56.4-56.5)	<b>53.0</b> (52.9-53.1)	<b>51.5</b> (51.3-51.6)	58.3 (58.2-58.4)	<b>55.6</b> (55.5-55.7)	<b>53.6</b> (53.5-53.6)	<b>52.7</b> (52.7-52.8)	<b>53.6</b> (53.5-53.7)	<b>55.3</b> (55.3-55.4)	54.2
		IAC	Linear	<b>52.1</b> (52.0-52.2)	50.4 (50.3-50.6)	<b>51.7</b> (51.6-51.8)	50.6 (50.5-50.7)	47.6 (47.5-47.8)	<b>54.4</b> (54.4-54.5)	<b>54.4</b> (54.3-54.4)	<b>51.0</b> (50.9-51.2)	49.5 (49.4-49.7)	<b>54.1</b> (54.0-54.2)	48.2 (48.1-48.4)	<b>54.3</b> (54.3-54.4)	54.7 (54.6-54.8)	<b>56.1</b> (56.0-56.1)	51.9
			Nonlinear	<b>52.3</b> (52.2-52.4)	50.9 (50.7-51.0)	<b>51.9</b> (51.7-52.0)	50.8 (50.7-51.0)	<b>51.4</b> (51.3-51.6)	<b>54.3</b> (54.2-54.4)	<b>54.3</b> (54.2-54.3)	<b>51.0</b> (50.8-51.1)	<b>52.2</b> (52.1-52.3)	<b>54.0</b> (53.9-54.2)	49.7 (49.6-49.8)	<b>54.8</b> (54.7-54.8)	<b>55.2</b> (55.1-55.3)	<b>56.4</b> (56.4-56.5)	52.3
		rPIPS	Linear	48.0 (47.9-48.2)	50.1 (49.9-50.2)	48.2 (48.1-48.4)	48.2 (48.1-48.4)	49.8 (49.6-49.9)	50.7 (50.6-50.8)	<b>51.1</b> (51.0-51.2)	48.8 (48.7-49.0)	48.8 (48.7-49.0)	<b>49.3</b> (49.1-49.4)	<b>49.7</b> (49.6-49.9)	<b>49.9</b> (49.8-50.0)	50.8 (50.7-50.9)	47.7 (47.6-47.9)	49.5
			Nonlinear	50.2 (50.0-50.4)	<b>55.2</b> (55.1-55.3)	<b>52.0</b> (51.9-52.2)	<b>50.1</b> (50.0-50.2)	<b>53.6</b> (53.5-53.7)	<b>49.8</b> (49.7-49.9)	<b>51.3</b> (51.2-51.4)	<b>52.1</b> (51.9-52.2)	<b>49.7</b> (49.5-49.9)	<b>53.5</b> (53.4-53.6)	<b>51.4</b> (51.3-51.5)	50.7 (50.5-50.8)	<b>52.6</b> (52.4-52.7)	<b>50.4</b> (50.3-50.5)	51.4