L1 – Manhattan Intra

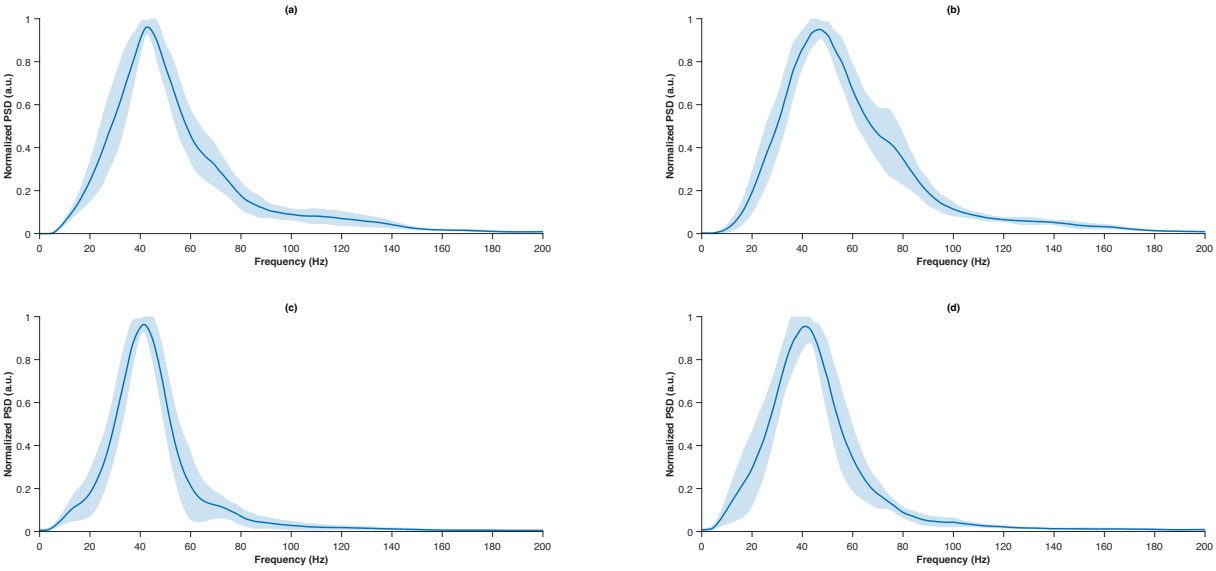


Figure S 1. Average power spectra of a representative participant under maximum-power normalization for all muscle–task conditions: (a) BB/SP, (b) BB/NT, (c) BR/SP, and (d) BR/NT. Shaded area represents the mean ± STD.

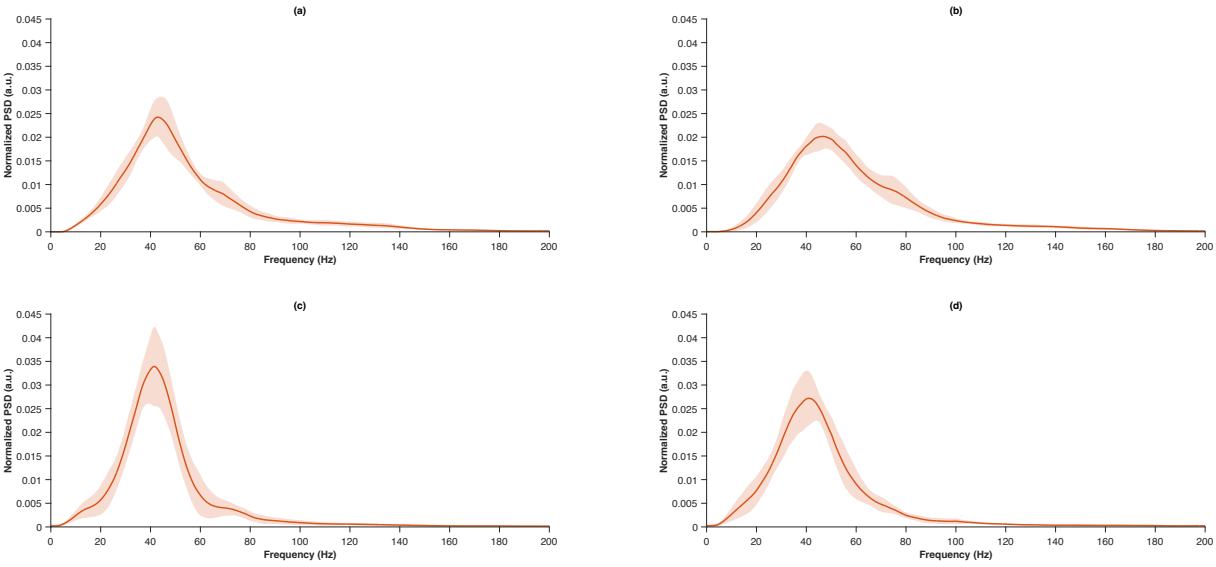


Figure S2. Average power spectra of a representative participant under energy normalization for all muscle–task conditions: (a) BB/SP, (b) BB/NT, (c) BR/SP, and (d) BR/NT. Shaded area represents the mean ± STD.

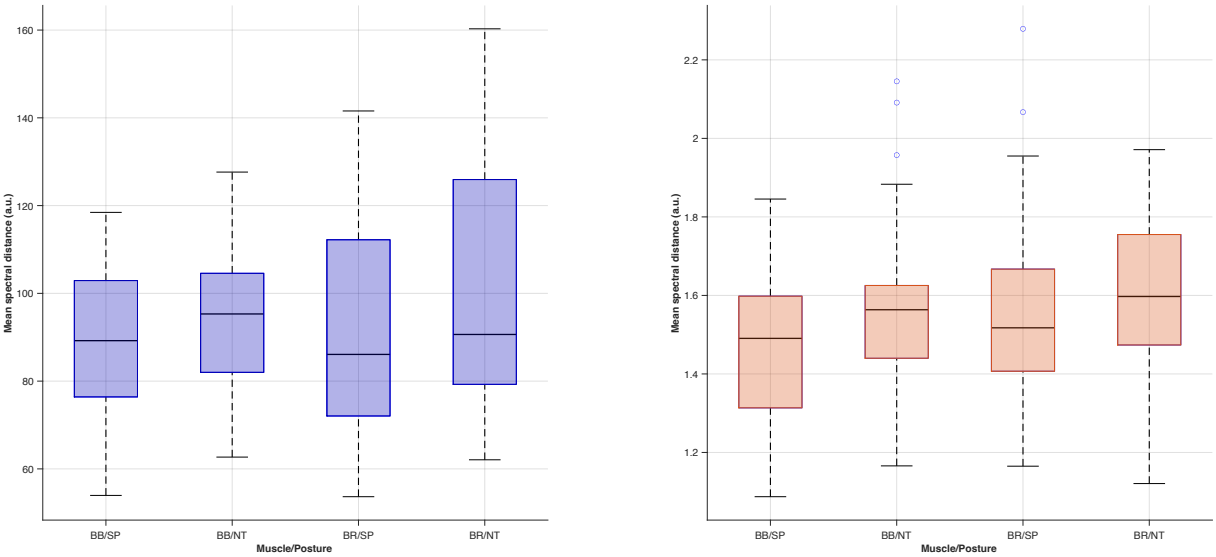


Figure S3. Boxplots showing intra-individual spectral variability across muscle–task categories. (a) Maximum-power normalization and (b) Energy normalization.

Manchatan L1 – INTER

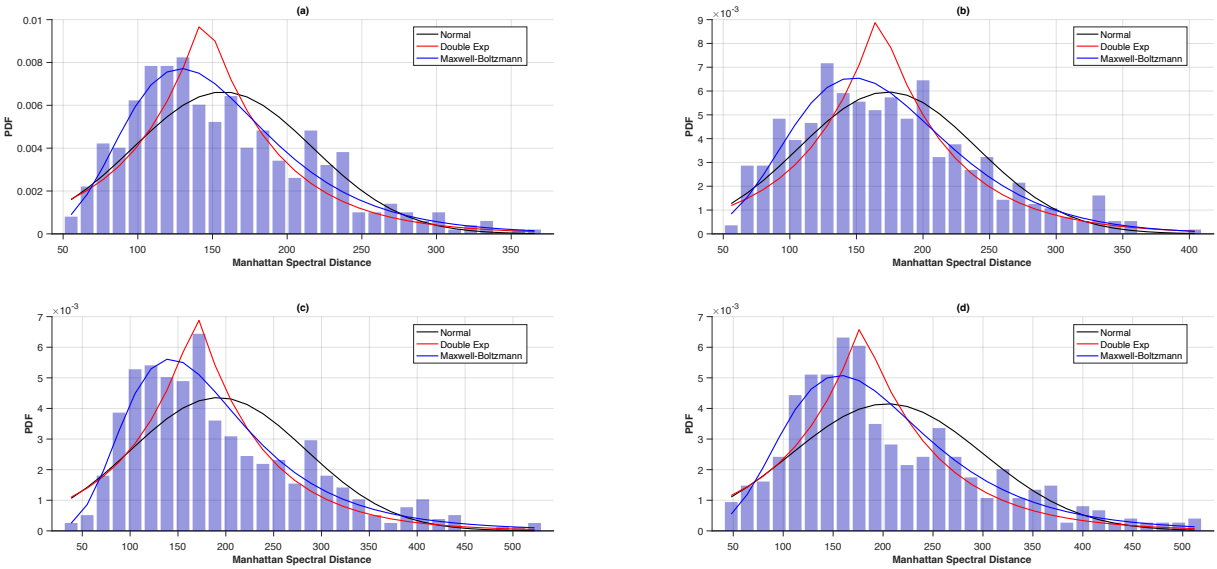


Figure S4. Histograms of pairwise inter-subject Euclidean distances for each muscle–task category under maximum-power normalization, along with fitted probability distributions. (a) BB/SP, (b) BB/NT, (c) BR/SP and (d) BR/NT.

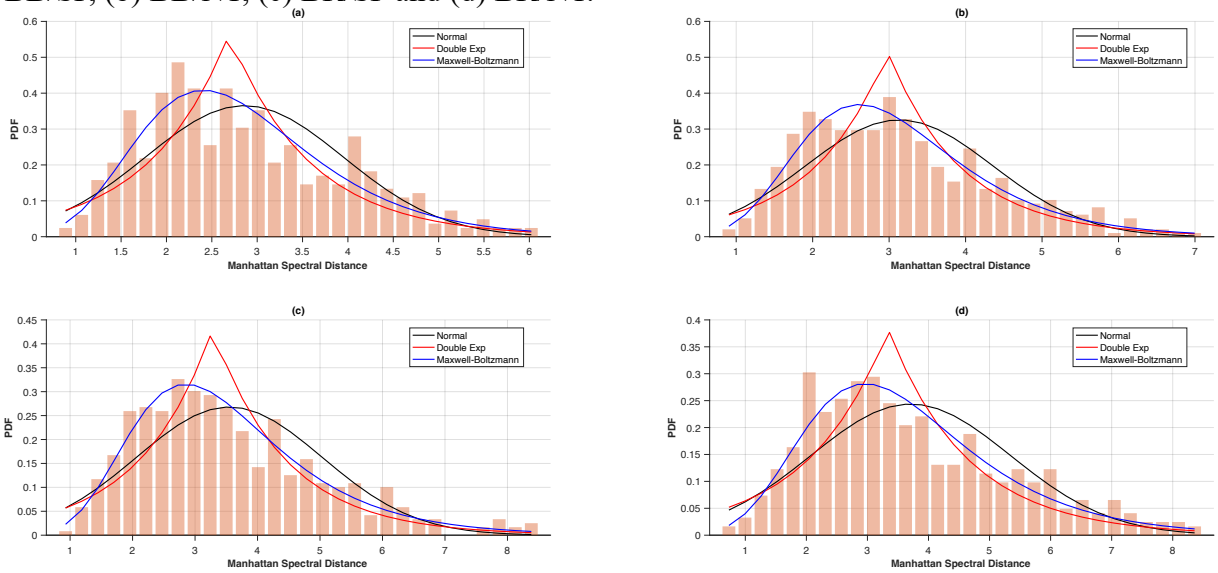


Figure S 5. Histograms of pairwise inter-subject Euclidean distances for each muscle–task category under energy normalization, with fitted probabilistic models. (a) BB/SP, (b) BB/NT, (c) BR/SP and (d) BR/NT.

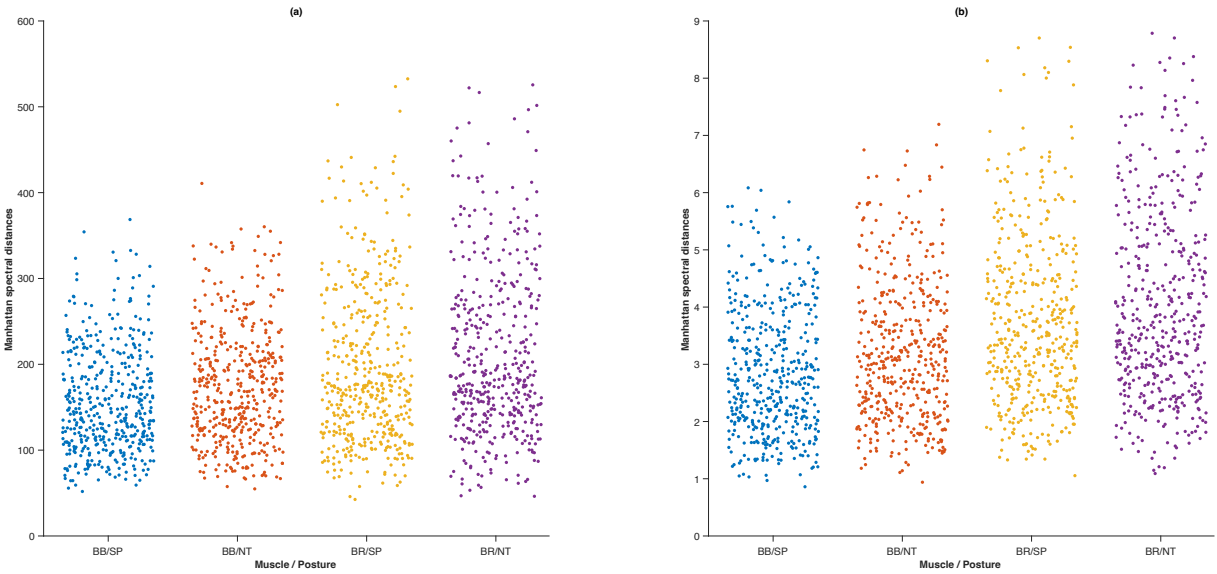


Figure S6. Pairwise inter-subject spectral distances for all muscle–task categories: (a) maximum-power normalization and (b) energy normalization. Vertical offsets are applied only for visual separation of categories.

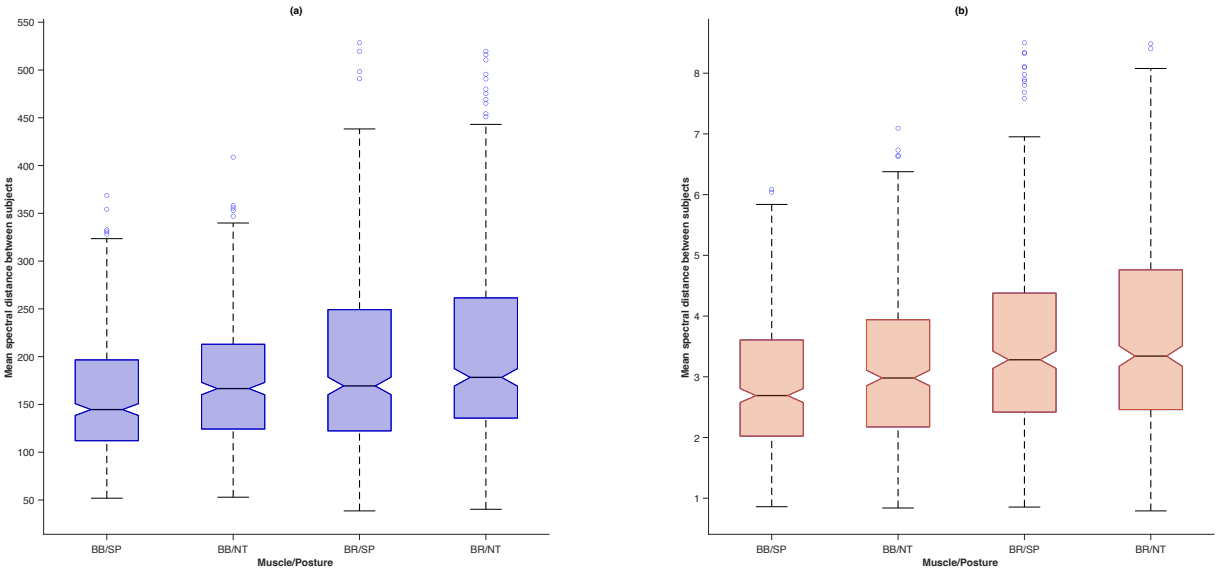


Figure S7. Boxplots showing inter-individual spectral variability across muscle–task categories. (a) maximum-power normalization and (b) energy normalization.

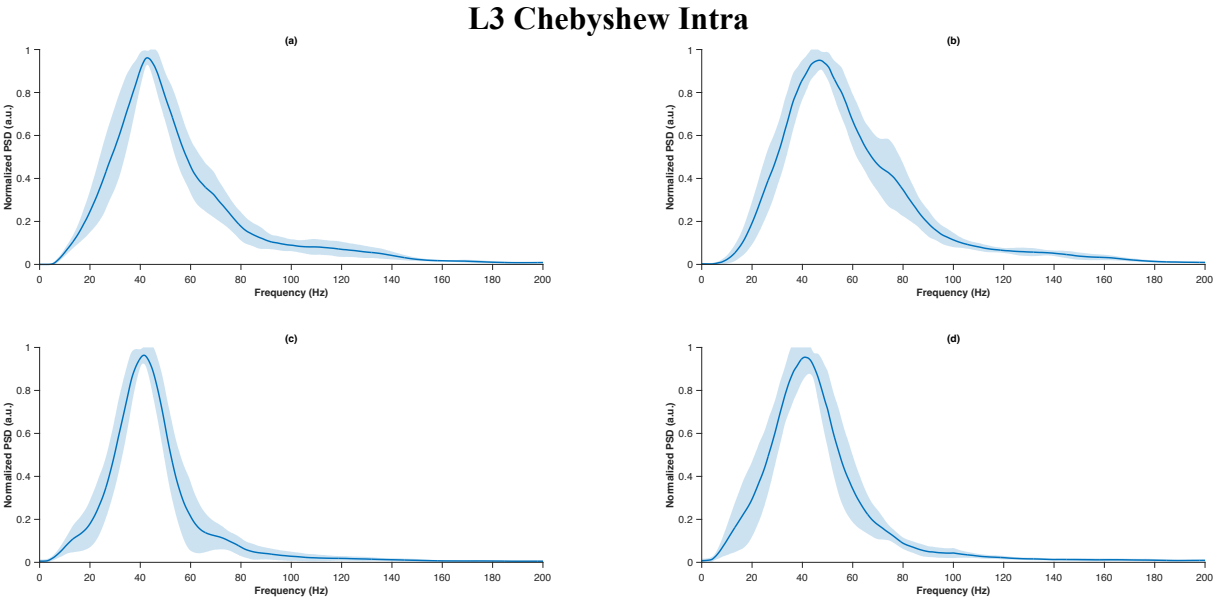


Figure S 8. Average power spectra of a representative participant under maximum-power normalization for all muscle–task conditions: (a) BB/SP, (b) BB/NT, (c) BR/SP, and (d) BR/NT. Shaded area represents the mean ± STD.

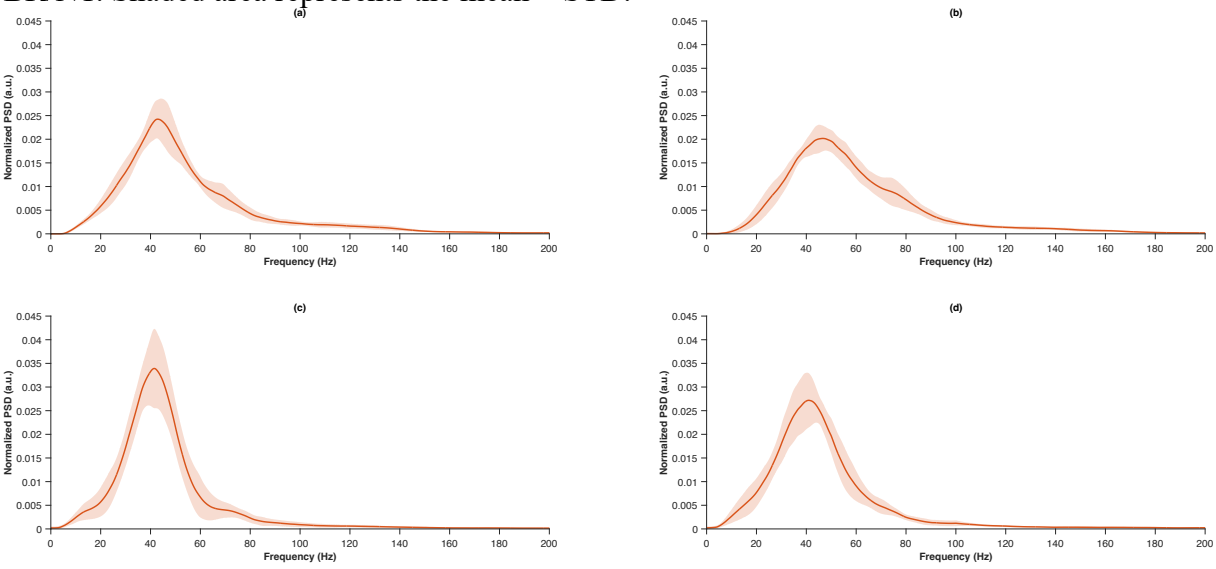


Figure S9. Average power spectra of a representative participant under energy normalization for all muscle–task conditions: (a) BB/SP, (b) BB/NT, (c) BR/SP, and (d) BR/NT. Shaded area represents the mean ± STD.

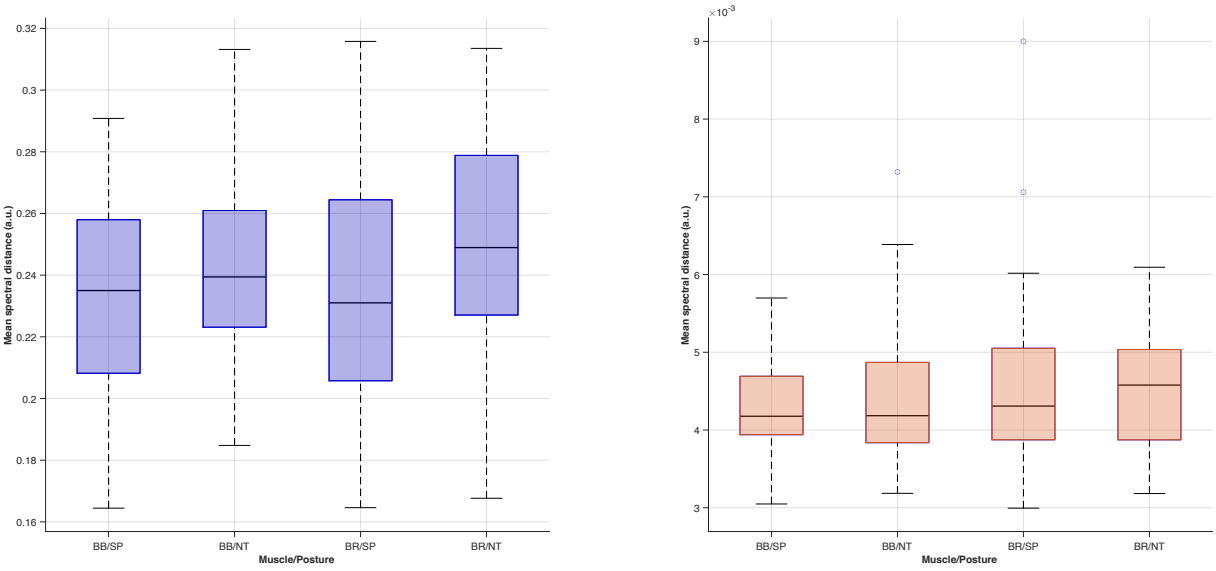


Figure S10. Boxplots showing intra-individual spectral variability across muscle–task categories. (a) Maximum-power normalization and (b) Energy normalization.

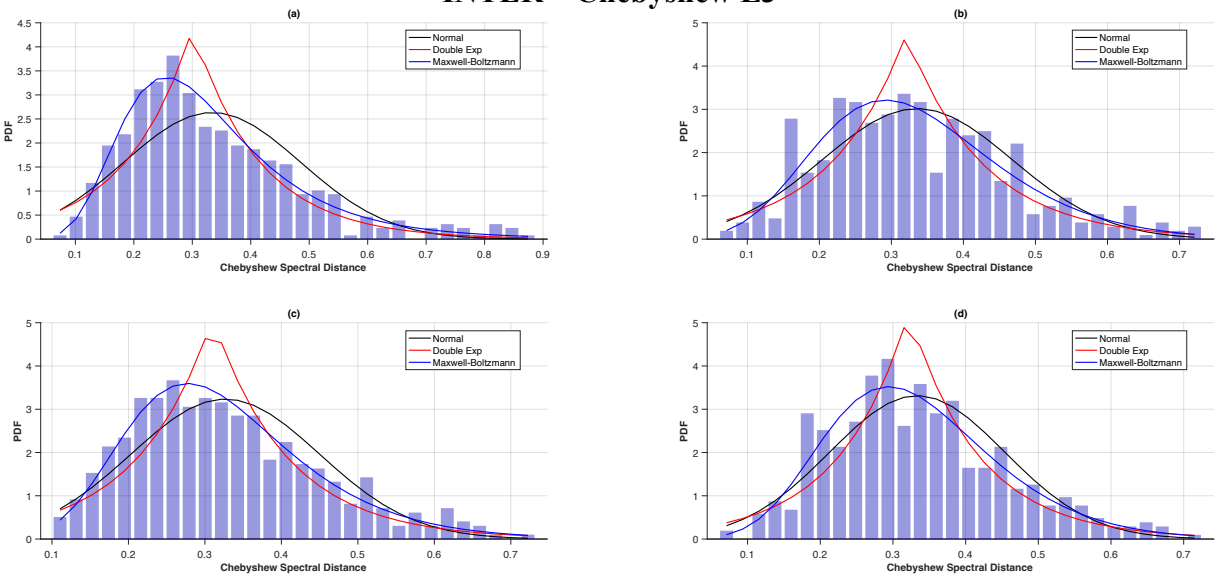


Figure S11. Histograms of pairwise inter-subject Euclidean distances for each muscle–task category under maximum-power normalization, along with fitted probability distributions. (a) BB/SP, (b) BB/NT, (c) BR/SP and (d) BR/NT.

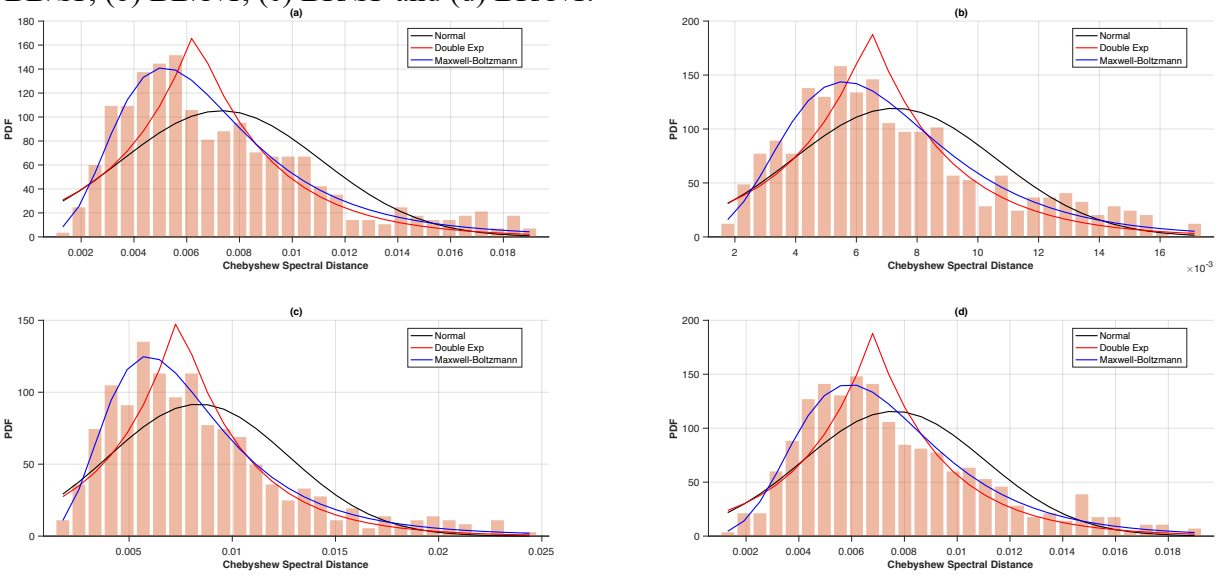


Figure S 12. Histograms of pairwise inter-subject Euclidean distances for each muscle–task category under energy normalization, with fitted probabilistic models. (a) BB/SP, (b) BB/NT, (c) BR/SP and (d) BR/NT.

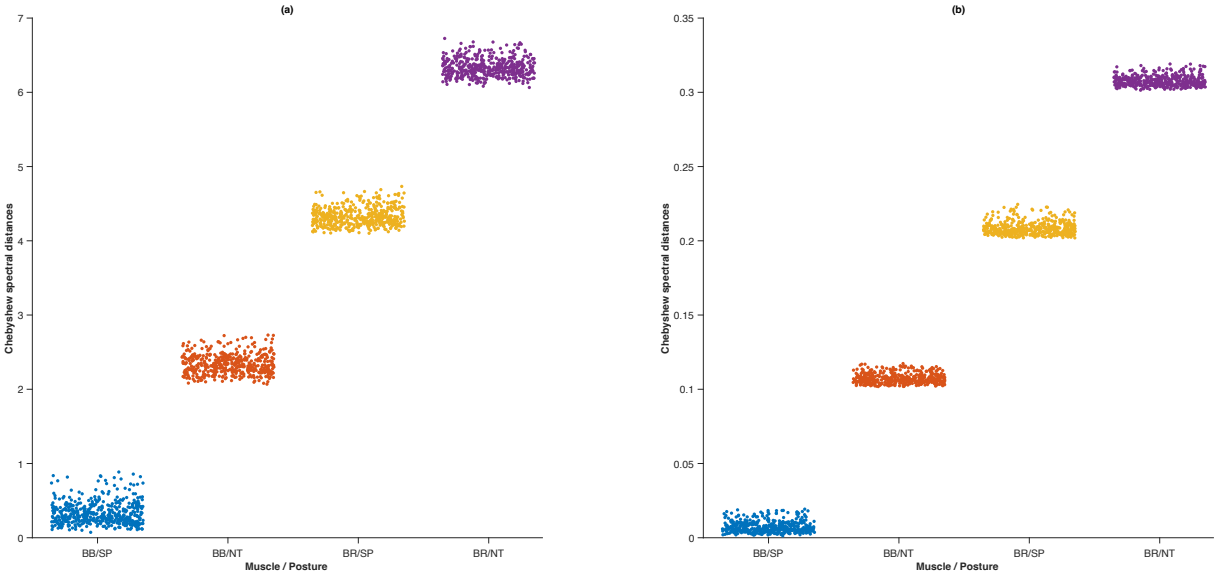


Figure S 13. Pairwise inter-subject spectral distances for all muscle–task categories: (a) maximum-power normalization and (b) energy normalization. Vertical offsets are applied only for visual separation of categories.

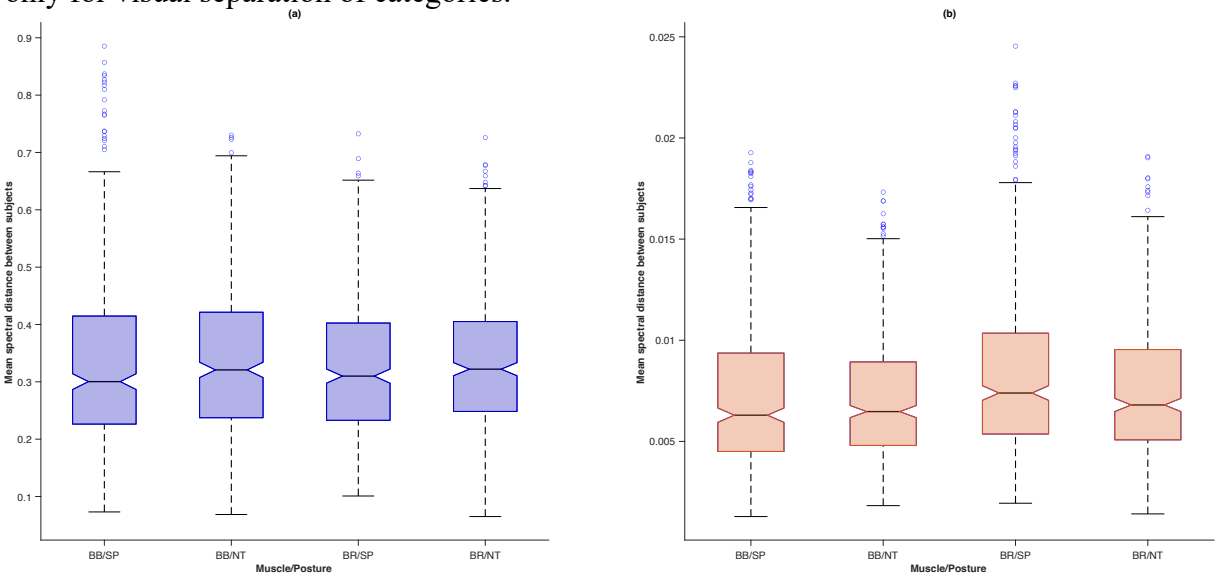


Figure S14. Boxplots showing inter-individual spectral variability across muscle–task categories. (a) maximum-power normalization and (b) energy normalization.