Figure S4. Significant synchronization in right leg movements of ID1 during playing of a drumming pattern (100.0 BPM) (Video S6). (**A**) Sound wave of the auditory stimulus (yellow) with the detected beat onsets (red vertical lines). (**B**) Observed (left) and phase-randomized (right) position data $s_{pos}(t)$ along the Y coordinate axis within a moving section. (**C**) Instantaneous phase of the musical beat $\phi_{music}(t)$ calculated from the detected beat onsets. (**D**) Instantaneous phase of the motion $\phi_{motion}(t)$. (**E**) Relative phase $\phi_{rel}(t)$ between motion and the musical beat. (**F**) Circular histograms of $\phi_{rel}(t)$. (**G**) Monte-Carlo statistics showed that the observed synchronization index (magenta line) was above the 95% confidence interval of the surrogate synchronization indexes (blue lines) calculated from 10,000 phase-randomized position data.