**Supplementary Material**



Figure 1: SPM repeated measures two-way ANOVA results for A. subtalar joint (STJ) displacement; B. normlaised STJ moments; C. normlaised STJ powers; D. normlaised tibialis posterior electromyography. Plots illustrate the main effects of support condition (left), velocity (middle), and interactions between support condition and velocity (right). Grey shaded areas indicate significant difference during the proportion of the gait cycle. Red dotted horizontal lines depict the critical random fields theory threshold at α = 0.05.