Synchronization in networks with multiple interaction layers
Supplementary Material

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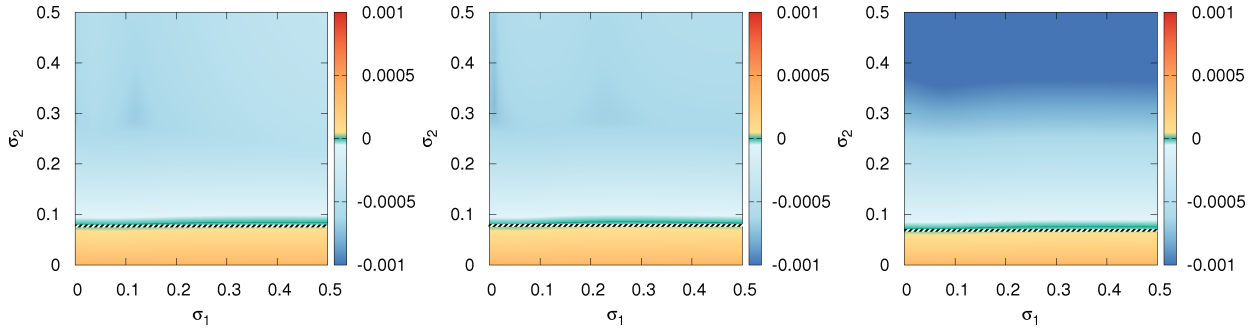

Figure S1: Maximum Lyapunov exponent Λ for systems falling into Case 1 (layer 1 in stability class I, layer 2 in stability class II), for SF–SF, ER–SF and SF–ER topologies (left panel, centre panel and right panel, respectively). The dark blue lines mark the points in the (σ_1, σ_2) space where Λ vanishes, while the striped lines indicate the critical value of σ_2 if layer 2 is considered in isolation (or, equivalently, if $\sigma_1 = 0$).

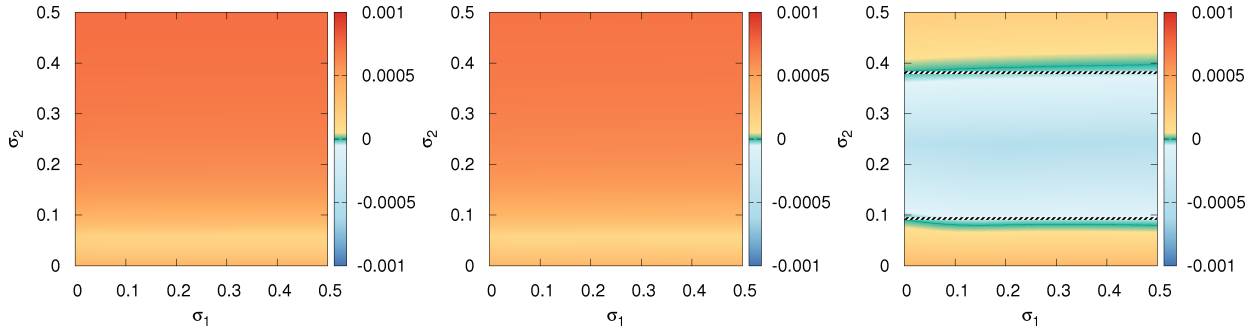

Figure S2: Maximum Lyapunov exponent Λ for systems falling into Case 2 (layer 1 in stability class I, layer 2 in stability class III), for SF–SF, ER–SF and SF–ER topologies (left panel, centre panel and right panel, respectively). The dark blue lines mark the points in the (σ_1, σ_2) space where Λ vanishes, while the striped lines indicate the critical values of σ_2 if layer 2 is considered in isolation (or, equivalently, if $\sigma_1 = 0$).

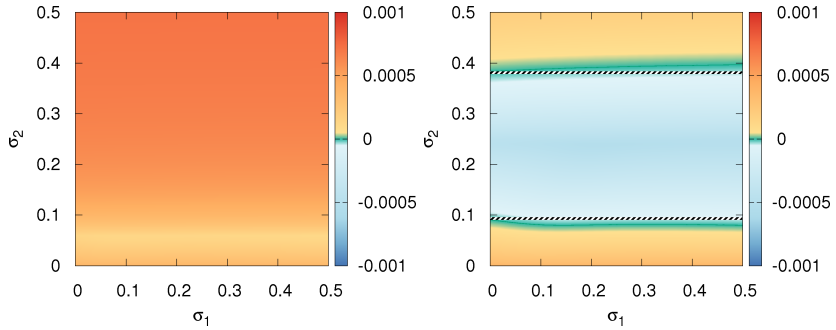

Figure S3: Maximum Lyapunov exponent Λ for systems falling into Case 3 (layer 1 in stability class II, layer 2 in stability class III), for ER–SF and SF–ER topologies (left panel and right panel, respectively). The dark blue lines mark the points in the (σ_1, σ_2) space where Λ vanishes, while the striped lines indicate the stability limits for the $\sigma_1 = 0$ and $\sigma_2 = 0$.