A closer look at the apparent correlation of structural and functional connectivity in excitable neural networks

Arnaud Messé, ^{1,*} Marc-Thorsten Hütt, ² Peter König, ³ and Claus C. Hilgetag ^{1,4}

¹Department of Computational Neuroscience, University Medical Center Eppendorf, Hamburg University, Germany

²School of Engineering and Science, Jacobs University Bremen, Germany

³Department of Cognitive Science, University Osnabrück, Germany

⁴Department of Health Sciences, Boston University, USA

^{*} Correspondence to a.messe@uke.de

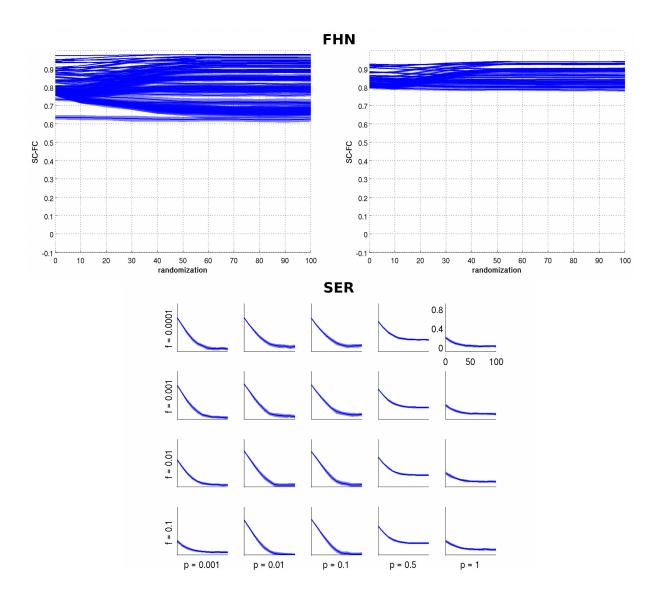


FIG. S1. Robustness of the SC-FC relationship against parameters setting. (Top) For the FHN model with various timescales (left, with $\tau_x \in \{.2, .4, .8, 2, 4, 8, 16\}$ ms and $\tau_y \in \{2, 10, 20, 50, 100, 200, 500\}$ ms) and various α and β (right, from .2 to 1.4 by step of .2). (Bottom) For the SER with various f (rows) and p (columns).