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Neural Dynamics, Exercise 9, January 28, 2016

Read the Chapter "Dynamic Field Theory" by Gregor Schöner, and Anne Schutte. This is essentially a script of the last three lectures. The chapter is available on the course web page (second file from top).

1. Around Figure 2.5, write down the dynamics of the two activation variables, u_1 and u_2, that would represent the dynamics of the field in the two locations. These are the combination of the dynamics of a single activation variable with self-excitation and of two activation variables with mutual inhibitory coupling, both of which we discussed earlier in the lecture course. These equations were also listed in the earlier Chapter 1 you have read. Identify which term in these equations is related to which aspect of the interaction kernel of the field.

2. Write down in one paragraph one point that you now understood better than in the lectures. If you do not find such a point, write down one idea that you understood well in both lecture and chapter.

3. Formulate at least one question you have about the Chapter. Can be a question of clarification, of generalization, or of apparent contradiction/conflicte. Alternatively, write a critical comment.