The Influence of Noise in Mean-Field Models of Neural Populations

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SUMMARY

Mean-field models (cf. [1],[2]) have been developed to emulate the behaviour of neural populations to be able to study their dynamics (cf. [3],[4]). These mean-field models describe quite well the mean behaviour of the neurons of the populations, but what happens if noise is involved? In this poster, we add noise to the voltage equations to study how noise influences the dynamics and the performance of the mean-field models (cf. [4]).

Keywords: coupled neural populations, noise

AMS Classification: 37Mxx, 60Hxx

References

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