Colóquio do CMAT

Fast-Slow Dynamics: Bifurcations and Canards in the FitzHugh-Nagumo System

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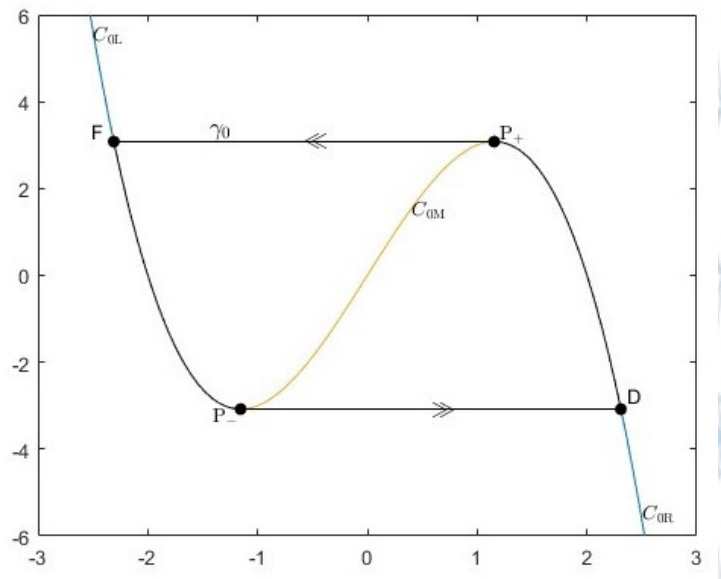
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In this talk, we study the FitzHugh–Nagumo fast-slow system where the vector fields associated to the fast/slow equations come from the reduction of the Hodgkin–Huxley model for the nerve impulse.
After deriving the dynamical properties of the singular and regular cases, we perform a bifurcation analysis and investigate how the parameters (of the affine slow equation) impact the dynamics of the system.
This talk is addressed to non-specialists on the field, and all results are numerically illustrated.

This is a joint work with Bruno Gonçalves and Isabel Labouriau.



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Anfiteatro de Física, Escola de Ciências (Edif. 6, Sala 1.02) Gualtar

Teams LINK

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