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Mode locking and quasiperiodicity in a discrete-time Chialvo neuron model

Fengjuan Wang, Hongjun Cao

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Highlights

- The two-dimensional parameter-spaces of a discrete-time Chialvo neuron model are numerically investigated.
- There exist mode locking structures with periods organized in a Farey tree sequence, embedded in a quasiperiodic/chaotic region in parameter spaces .
- Properties of the transition from quasiperiodicity to chaos are presented clearly and proved by numerical simulations.

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