

Centro de Investigação em Matemática e Aplicações Departamento de Matemática Programa de Doutoramento em Matemática

Seminário / Seminar

Date: 14.11.2024, Room: Anf. 1 CLAV, Time: 14h30

 ${\bf Zoom~address:}~~{\tt https://videoconf-colibri.zoom.us/j/5664652821?pwd=WXJBSWUxL25vR3hJUWRhWHpoWENSdz09}$

Evolutionary algorithms for cellular automata and applications

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Abstract: Evolutionary and genetic algorithms applied to cellular automata are considered. Certain processes are described, such as recombination, assembly, and mutation, and used to transform specific families of cellular automata. Evolving populations of cellular automata and its main characteristics are analysed. Applications are discussed, namely to pseudo random number generators and simulation of natural phenomena such as fractures.

Keywords: Cellular automata, evolutionary algorithms, genetic algorithms, simulation.

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