



# Seminar

## Systems and Control Group - CIDMA

**17 de maio de 2019, 14h30**

Departamento de Matemática, Universidade de Aveiro  
Auditório Sousa Pinto

Kinematics of complex movement

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### Abstract

We present a discrete dynamical system which is used to produce and classify a variety of types of movements in arbitrary dimensions. The dynamical system is deterministic and is defined by a family of bimodal interval maps dependent on two real parameters, up to scaling. The characterization of the movements is based on the topological classification of the dynamical system using techniques from symbolic dynamics. Applications to animal movement are discussed.

This seminar was supported in part by the Portuguese Foundation for Science and Technology (FCT – Fundação para a Ciência e a Tecnologia), through CIDMA - Center for Research and Development in Mathematics and Applications, within project UID/MAT/04106/2019.

**FCT** Fundação para a Ciência e a Tecnologia

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