

## **FMSP Lectures**

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'Oumuamua, the Gömböc and the Pebbles of Mars

May 15, 2019 17:30 – 18:30 Room 122

Abstract:

In this talk I will concentrate on two examples from planetary science, which made the headlines in recent years to highlight the power and significance of nonlinear geometric partial differential equations (PDEs) explaining puzzles presented by Nature. One key link between PDE theory of shape evolution and natural phenomena is the Gömböc, the first mono-monostatic object whose existence was first conjectured by V.I. Arnold in 1995. I will explain the connection and illustrate the process how mathematical models of Nature may be identified.

**Details**