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*Symmetries in Non-local Adhesion Models*

Non-local Models for Cellular Adhesion

Cellular adhesion is one of the most important interaction forces between cells and other tissue components. In 2006, Armstrong, Painter and Sherratt introduced a non-local PDE model for cellular adhesion, which was able to describe known experimental results on cell sorting and cancer growth. The analysis becomes challenging through non-local cell-cell interaction and interactions with boundaries. In this talk I will use symmetry methods to analyse aggregations and pattern formation of the non-local adhesion model. (joint work with A. Buttenschoen).