

Module 6: Dictyostelium cluster formation & slug movement

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Aim

- this was planned as a one week project, students should develop a complex model
- teach them about biology: morphogenesis, cellular behavior, ...
- teach them about mathematics: CPM, PDE, coupling

Description

- Step by step description of module
- Written such that other tutors can teach the same stuff

Paper

- Savill, N. J., & Hogeweg, P. (1997). Modelling morphogenesis: from single cells to crawling slugs. *J. Theor. Biol*, 184, 229-235. [link](#)
- Stan Marée (2002), From pattern formation to morphogenesis: multicellular coordination in *Dictyostelium discoideum* [link](#)
- Alberto Quintero, Mirko Myllykoski, Anna Igolkina, Alexandra Rohde O'Sullivan Freltoft, Nitya Dixit, Fabian Rost (2012), Morphogenesis and Dynamics of Multicellular Systems, [link](#)

Morpheus models

[Link to Example page](#)

h MorpheusModel.xml |h

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Last update: **11:53 11.01.2013**

