

PHYSICAL MATHEMATICS SEMINAR

Symmetry breaking in the *Drosophila* germline cyst

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ABSTRACT:

Proper development and growth of all organisms requires biological decisions that are precisely defined spatially and temporally. In many cases, these processes arise from the breaking of some symmetry, creating new structures or modifying existing ones that are essential for continued development. In addition to experimentally-derived measurements and high-level quantification of these events, mathematical models provide a systematic approach for analyzing these processes, revealing key insights into robustness based on properties of the organism itself. Here, we demonstrate how these novel computational approaches and quantitative methods shed light on the processes of oocyte selection and growth pattern emergence within multicellular clusters.

TUESDAY, OCTOBER 26, 2021

2:30 PM – 3:30 PM

Building 2, Room 449

<http://math.mit.edu/seminars/pms/>

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- remember to keep your mask on while inside buildings
- eating food is not allowed within lecture rooms