Studying self-organisation mechanisms

Abstract
A defining feature of living systems is the capacity to break symmetry and generate well-defined form, size and pattern through self-organisation. Our group aims to understand the principle of multi-cellular self-organization, using early mammalian embryos as a model system. To this end, we have established an experimental framework that integrates biology, physics and mathematics. Our studies aim to understand how molecular, cellular and physical signals are dynamically coupled across various spatio-temporal scales for self-organisation. In this talk I will illustrate our principle strategy, using recent studies as an example.