



VI Escuela de Verano en Sistemas Complejos

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Abstract

Course
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An approach to pattern formation

Pattern Formation is a discipline that arises from nonlinear dynamics in extended systems. It's a strongly interdisciplinary subject. There are many similarities in fundamental mechanisms and mathematics that brings together scientists from many disciplines, such as biology, ecology, fluid dynamics, material science, mathematics, medicine, and physics, among others. In this talk we will take a look at classical problems that are present in the literature, and we will finish with some open questions.

Suggested reading: Pattern Formation Outside of equilibrium, M.C. Cross and P. C. Hohenberg, Rev. Mod. Phys., vol. 65, p. 851-1112, 1993.