物理教室物性コロキュウム

日時: 1月29日(木) 16:30-18:00

場所: 理学部 総合研究棟 921号室 (物性理論セミナー室)

講師: Prof. Dr. Walter Zimmermann (Universitaet des Saarlandes)

題目: Examples of pattern formation, during driven ion-channel assembling,

microtubule polymerization, and in filament-motor systems

要旨: In a model system with two types of mobile ion-channels having opposite charges in a membrane an oscillatory pattern forming transition may occur where the order parameter is conserved. Since the transition is oscillatory, this gives rise to a new universal equation. It is well known since Onsager that for a density of filaments beyond a critical value an isotropic to nematic transition takes place which is often accompanied by a phase separation into ranges of the isotropic and ranges in the nematic state. If these filaments are not fixed (such as microtubule and actin in biological systems) and that are often continuosly nucleated, growing and which have a finite life time, in such a case spatially periodic patterns instead of phase separation can be expected.

連絡先: 川勝年洋 (217-6438)

16:15 よりコーヒー、紅茶、お菓子を用意します。

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