

21COE 物質階層融合科学セミナー
物性コロキウム

日時： 6月26日(月) 16:30 - 18:00

場所： 理学部 理学総合棟 745号室(大学院講義室I)

講師： Helmut R. Brand (Dept. of Physics, University of Bayreuth)

題目： Phase winding in chiral liquid crystalline monolayers

要旨： We discuss our recent work on collective pattern forming effects in chiral monolayers [1], which was stimulated by experimental work of Tabe and Yokoyama [2]. We point out that the Lehmann effect, known from cholesteric crystals, provides a natural framework to understand the experimental results following up on earlier work of our group on the Lehmann effect [3,4]. We also highlight the close connection between the patterns formed in chiral monolayers and those found in smectic C films under the influence of an external force [5,6].

[1] D. Svensek et al., PRL 96, 140601 (2006)

[2] Y. Tabe and H. Yokoyama, Nature Mat. 2, 806 (2003)

[3] HRB and H. Pleiner, Phys. Rev. A37, 2736 (1988)

[4] HRB and P.E. Cladis, PRL 72, 104 (1994)

[5] P.E. Cladis et al., PRL 55, 2945 (1985)

[6] P.E. Cladis et al., PRL 75, 1518 (1995)

連絡先： 内田就也 (795-7756)

16:15 よりコーヒー、紅茶、お菓子を用意します。

世話人： 岩井伸一郎 (795-6423) 中島龍也 (795-6441)
松井広志 (795-6604) 内田就也 (795-7756)