WORKING AND LITERATURE SEMINAR

Topic: **Small Deborah Number Limit of the Doi-Onsager System to the Ericksen-Leslie System**

Speaker: **Dr. Wei Wang, Peking University**

Time: 15:00-16:00, 3 March 2014

Venue: Room 379, Geography Building, 3663 Zhongshan Road North, Shanghai
(华东师范大学中山北路校区，地理楼 379 室)

ABSTRACT OF THE TALK

Doi-Onsager model and Ericksen-Leslie model are two important models for describing the nematic liquid crystal flows. They are derived from different viewpoints and both widely used theoritically and numerically. In this talk, we will discuss the relationship between these two models. We will prove that, as the Deborah number, an important scaleless parameter goes to zero, the solution of Doi-Onsager system will converge to the solution of Ericksen-Leslie system.

BIOGRAPHY

Wei Wang is Postdoctor of Beijing International Center for Mathematical Research (BICMR) in Peking University.