



香港中文大學
The Chinese University of Hong Kong



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FIRST IN
CHANGE

Analysis and PDE Seminar

Professor Ning Jiang

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TITLE: On inertial Ericksen-Leslie system for nematic liquid crystals

Date : November 25th, 2021 (Thursday)

Time : 10am-11am (Hong Kong time)

11am-12noon (Korea time)



Link to ZOOM : <https://unist-kr.zoom.us/j/3170659442>

Meeting ID : 317 065 9442

Password : APDE21

Abstract. In this talk, we will review recent progress on the analytic studies on the inertial Ericksen-Leslie system for nematic liquid crystals. This system is a coupling of Navier-Stokes equations and wave map (the target manifold is 2-sphere) type equations. We study the well-posedness in the context of regular solutions, and justify the zero-inertia limit to the corresponding parabolic Ericksen-Leslie system. We also consider other asymptotic analysis problem, such as low Mach number limit, and dissipative solutions.

All are welcome

This is a joint activity organized by Department of Mathematics, The Chinese University of Hong Kong, Hong Kong; Department of Mathematics, Institute of Mathematical Research, Research Division of Mathematical and Statistical Science, The University of Hong Kong, Hong Kong; and Department of Mathematical Sciences, Ulsan National Institute of Science and Technology, Korea. More details can be found in https://hkumath.hku.hk/~imr/event/CUHK_HKU_UNIST_Analysis_and_PDE/index.php.

