讲座题目：Polar Hydrodynamics: wave/ice/body interactions
主讲人： 吴国雄 英国伦敦大学教授
时 间： 2019 年 1 月 12 日（星期六）上午 9:00-10:30
地 点： 海动实验室 A301 会议室

讲座简介：The hydroelastic problem of wave/ice/body interactions will be considered within the framework of the velocity potential theory for the fluid flow and linear elastic thin plate theory for the ice sheet. Both analytical, numerical and approximate methods will be used. Through the obtained explicit equations, the physical mechanisms of the complex behaviours of wave and body motion are explained. Specifically, the presentation will cover the hydroelastic research in the following areas: (1) arctic shipping route, (2) resources extraction, (3) underwater vechiles, (4) wave propagation through imperfect ice sheet.

主讲人简介：吴国雄教授，中组部首批"千人计划"教授、长江学者讲座教授。1982 年本科毕业于上海交通大学船舶与海洋工程系，1984 年和 1986 年在英国伦敦大学（University College London）分别获得船舶与海洋工程专业硕士和博士学位。现任英国伦敦大学教授、英国船舶系统研究组成员、英国劳氏教育基金会首席专家，是由 UCL、上海交通大学和哈尔滨工程大学组成的深水工程及水动力学国际联合研究中心的首席教授，承担 20 余个英国大型国家海洋工程研发项目。吴国雄教授在线性和非线性水动力学、计算流体力学、数学方法及流固耦合等多个学科领域具有重要影响，在 Proceedings of Royal Society、Journal of Fluid Mechanics、Journal of Fluids Structure、Quarterly Journal of Mechanics and Applied Mathematics 等高影响因子的国际期刊上发表论文近百篇。

报告参考文献：

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[3] Li, Z.F, Shi, Y.Y., Wu, G.X. (2017) "Interaction of wave with a body floating on a wide polynya" Physics of Fluids, Vol.29, 097104

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[5] Li, Z.F., Wu,G.X., Ji, C.Y. (2018) "Wave radiation and diffraction by a circular cylinder submerged below an ice sheet with a crack" Journal of Fluid Mechanics, Vol.845, 682-712

[6] Li, Z.F, Wu,G.X. Ji,C.Y. (2018) "Interaction of wave with a body submerged below an ice sheet with multiply arbitrarily spaced cracks" Physics of Fluids, Vol.30, 057107

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[8] Ren, K. Wu, G.X. Ji, C.Y. (2018) "Wave radiation and diffraction by a vertical cylinder standing in a three dimensional polynya" Journal of Engineering Mathematics, Vol.113, 45-64

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