



海岸和近海工程国家重点实验室 学术讲堂

题 目： **Lifting objects off the seabed**

报告人： **Dr. Yinghui TIAN**

时 间： **2023年04月12日 15:30-16:30**

地 点： **海动A301会议室 &
腾讯会议房间号： 966 2798 6502**



内容简介：

Dr Yinghui Tian is an ARC (Australian Research Council) Future Fellow, working at the Department of Infrastructure Engineering of the University of Melbourne. Prior to his appointment at Melbourne, he had worked at the Centre for Offshore Foundation Systems (COFS) of the University of Western Australia. His research background is offshore geotechnics and he is currently concentrating on doing research in offshore anchoring systems and renewable energies supported by the ARC Future Fellowship. He is the recipient of the Institution of Civil Engineers (ICE) David Hislop Award for the best paper on offshore engineering in 2017. He has produced a total of 182 publications (101 journal papers, 54 conference papers, 3 book chapters, 25 technical reports for industry projects, excluding ~30 journal papers published in Chinese).

Abstract: Most of us have experienced the difficulty of lifting our shoes up from muddy ground (the quintessential 'stuck in the mud'). This phenomenon, terminologically called the breakout problem, has become increasingly important in studying lifting objects off the seabed, as it is the scientific basis for a variety of offshore applications, such as (1) retrieval of oil and gas infrastructure sitting on the seabed for decommissioning, repairing or even repositioning; (2) marine salvage; and (3) securing submarine foundations against lifting away under severe storm conditions. This seminar reviews the speaker's research work in the past couple of years in investigating the process of lifting objects off the seabed. Essentially, it will concentrate on (1) the effect of uplifting rate on the resistance capacity; (2) sustained uplifting loading for offshore foundations; (3) developing numerical structure-soil interface to facilitate uplifting modelling.