



Department of  
Mechanical Engineering  
The University of Hong Kong



## SEMINAR

### Magnetic soft robots

- Date:** 19 April, 2023 (Wednesday)  
**Time:** 10:30 a.m.  
**Venue:** Room 7-34, Haking Wong Building, HKU
- Speaker:** Mr. Deng Qiyu (PhD candidate)  
Department of Mechanical Engineering  
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#### Abstract:

Soft robots are more mechanically flexible compared with rigid robots, with the former being potentially safer and more versatile due to its soft base materials. Soft robots can be driven by various stimuli, such as electric or magnetic fields, chemical reactions, heat, light, or pressure, to perform a variety of tasks in varied settings. As magnetic fields can permeate a variety of materials, magnetic soft robots offer special benefits owing to their untethered characteristics. However, there are still many problems with the design, fabrication, and autonomous manipulation of magnetic soft robots due to their complex systems regarding multi-physical field coupling problems. The future development of magnetic soft robots requires not only a comprehension of fundamental mechanisms but also the resolution of technical issues. Herein, to provide a thorough grasp of this field, the recent progress of magnetic soft robots in terms of their working principles, fabrication methods, and applications will be discussed.

ALL INTERESTED ARE WELCOME

For further information, please contact Prof. X.B. Yin at 3910 2659.