# **Croucher Conference in Frontiers of Cold Atom Physics**

## 5 – 8 December 2017 (Tuesday – Friday) Lecture Theater P3, LG1/F, Chong Yuet Ming Physics Building

### Announcement

Over the past few years, both experimental and theoretical advances in cold atom physics have enabled it to address many frontier problems in condensed matter physics, such as topological states and many-body localization, while at the same time, novel superfluids, such as those occurring in a boson-fermion mixture, have also been created. On the other hand, there have been significant advances in the study of ultra-cold molecules and in general few-body physics with much enhanced precision and sophisticated manipulation.

This conference aims to bring together researchers in various directions of cold atoms, to report the newest findings and discuss the current perspective and challenges in the field. We hope that the conference will stimulate synergies between the various directions mentioned above and generate new ideas that enhance collaborations.

#### **Invited Speakers**

Miguel Cazalilla (Tsinghua, Taiwan) Lawrence Cheuk (MIT, USA) Frédéric Chevy (ENS, France) Xiaoling Cui (IOP, China) Leonardo Fallani (LENS, University of Florence, Italy) Jason Ho (OSU, USA) Gyu-Boong Jo (HKUST, Hong Kong) Selim Jochim (Heidelberg, Germany) Hanns-Christoph Nägerl (Innsbruck, Austria) Dmitry Petrov (LPTMS, CNRS, Orsay, France) Peter Schauss (Princeton, USA) Klaus Sengstock (Hamburg, Germany) Gora Shlyapnikov (LPTMS, CNRS, Orsay, France) Jon Simon (Chicago, USA) Leticia Tarruell (ICFO, Spain) Joseph Thywissen (Toronto, Canada) Dajun Wang (CUHK, Hong Kong) Sungkit Yip (IOP, Academia Sinica) Hui Zhai (IAS, Tsinghua, China) Jing Zhang (Shanxi, China) Bo Zhao (USTC, China)

#### **International Advisory Committee**

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Registration: http://www.physics.hku.hk/croucher2017/ca/Registration.htm For enquiry:

Please contact Miss Anna Wong (Conference Secretary) at annaylw@hku.hk

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