# **CUHK/UM Joint International Workshop in Geometry**

Date: March 4th - 10<sup>th</sup>, 2015

Organizers: Huai-Dong Cao (Lehigh & UM), Kwok-Wai Chan (CUHK) and Conan Leung (CUHK)

## TENTATIVE SCHEDULE

#### <u>Location: Room 502a, Academic Building No. 1, CUHK (March 4th - 7th)</u>

#### March 4th (Wednesday)

9:30 am - 10:30 am Andrei Pajitnov (Université de Nantes)

Arnold conjecture, Floer homology, and augmentation ideals of finite groups

10:30 am - 11:00 am Tea reception

11:00 am - 12:00 pm Weiwei Wu (Université de Montréal)

Homological mirror symmetry for special isogenous tori

2:30 pm - 3:30 pm Open discussion

3:30 pm - 4:00 pm Tea reception

4:00 pm - 5:00 pm Open discussion

6:30 pm - 10:00 pm Workshop banquet

## March 5th (Thursday)

9:30 am - 10:30 am Huai-Dong Cao (Lehigh University & University of Macau)

(TBA)

10:30 am - 11:00 am Tea reception

11:00 am - 12:00 pm Takahashi Ryosuke (Harvard University)

The moduli space of S^1-type zero loci for Z/2-harmonic spinors and

compactness of PSL(2;C) connections

2:30 pm - 3:30 pm Open discussion

3:30 pm - 4:00 pm Tea reception

4:00 pm - 5:00 pm Open discussion

March 6th (Friday)

9:00 am - 10:00 am Sheng Rao (Wuhan University)

Several special complex structures and their deformation properties

10:00 am - 11:00 am **Wanmin Liu** (HKUST)

Bayer-Macrì decomposition on Bridgeland moduli spaces over surfaces

11:00 am - 11:30 am Tea reception

11:30 am - 12:30 pm Andriy Haydys (Universität Bielefeld)

A compactness theorem for the Seiberg-Witten equations with multiple

spinors

### Location: Room 1041, Building E11 (Faculty of Science and Technology), UM (March 8th - 10th)

March 8th (Sunday)

2:30 pm - 4:00 pm Open discussion

March 9th (Monday)

9:30 am - 10:15 am **Kwokwai Chan** (CUHK)

A mathematical foundation of quantum field theory. Part I

10:15 am - 10:45 am Break

10:45 am - 11:30 am **Conan Leung** (CUHK)

Witten-Morse theory and mirror symmetry. Part I

11:30 am - 12:15 pm **Zhongtao Wu** (CUHK)

Topology in chemistry and biology

2:30 pm - 4:00 pm Open discussion

March 10th (Tuesday)

9:30 am - 10:15 am **Qin Li** (CUHK)

A mathematical foundation of quantum field theory. Part II

10:15 am - 11:00 am Ziming Ma (Tsinghua University & Harvard University)

Witten-Morse theory and mirror symmetry. Part II