

UNIVERSITY OF HONG KONG  
INSTITUTE OF MATHEMATICAL RESEARCH/DEPARTMENT OF MATHEMATICS  
AND

PENNSYLVANIA STATE UNIVERSITY DEPARTMENT OF MATHEMATICS

## Conference on Geometry and Lie Theory (with the Hong Kong Geometry Colloquium)

5-8 March, 2014 Room 210, Run Run Shaw Building, HKU

### Wednesday, 5 March

10:00-10:05 Ngaiming Mok (Director, Institute of Mathematical Research, HKU)

*Opening remarks*

10:05-10:10 Remarks by the Organizers

10:10-11:10 Allen Knutson (Cornell University)

*Interval rank varieties and Grassmannian Schubert calculus*

Coffee/Tea Break

11:30-12:30 Milen Yakimov (Louisiana State University)

*Poisson unique factorization domains in Lie theory*

Lunch Break

13:50-14:50 Mathieu Stienon (Pennsylvania State University)

*Poincaré-Birkhoff-Witt isomorphisms and  $L$ -infinity algebras associated to Lie pairs*

### Thursday, 6 March

14:00-15:00 Conan Leung (Chinese University of Hong Kong)

*Coisotropic  $A$ -branes in SYZ mirror symmetry*

Coffee/Tea Break

15:15-16:15 Ting Xue (University of Helsinki)

*Nilpotent orbits and Springer representations*

Coffee/Tea Break

16:30-17:30 Dragan Milicic (University of Utah)

*Geometry,  $n$ -homology and discrete series*

Conference Dinner

### Friday, 7 March

10:00-11:00 Sam Evens (University of Notre Dame)

*The Gelfand-Zeitlin system and  $K$ -orbits on the flag variety*

Coffee/Tea Break

11:30-12:30 Tudor Ratiu (École Polytechnique Fédérale de Lausanne)

*The geometric nature of the Flaschka transformation*

Lunch Break

14:00-14:45 Victor Mouquin (University of Hong Kong)

*On a Poisson structure on products of flag varieties*

15:00-15:45 Yunxin Zhang (University of Hong Kong)

*Characterization of standard model in rational homogeneous spaces by means of VMRT-structure*

### Saturday, 8 March (Hong Kong Geometry Colloquium)

10:00-11:00 Aissa Wade (Pennsylvania State University)

*An odd-dimensional counterpart of generalized complex geometry*

Coffee/Tea Break

11:30-12:30 Ping Xu (Pennsylvania State University)

*Holomorphic Poisson manifolds and symplectic realizations*

*Organizers: Jiang-Hua Lu, Aissa Wade, Siye Wu and Ping Xu*