

# **Classification Theorems of Bihamiltonian Hierarchies and Their Applications**

Si-Qi Liu

*Tsinghua University*

In this talk, the speaker will explain our recent work on the classification of integrable hierarchies which possess semisimple bihamiltonian structures of hydrodynamic type. He will also introduce a new proof of ADE Witten conjecture by using Dubrovin-Zhang, Chao-Zhong Wu, and their results.