1147-14-345   **Kwokwai Chan*** (`kwchan@math.cuhk.edu.hk`), Department of Mathematics, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong, Hong Kong, and **Naichung Conan Leung** and **Ziming Nikolas Ma**. *Asymptotic analysis on Maurer-Cartan equations.*

I will explain how asymptotic analysis on the solutions of Maurer-Cartan equations in various settings naturally give rise to tropical objects such as scattering diagrams and tropical curves. As applications, we proved a modified version of a conjecture by Fukaya, and gave an interpretation for the wall-crossing phenomenon for Gross' perturbed potential for a toric surface. This talk is based on recent joint works with Naichung Conan Leung and Ziming Nikolas Ma (arXiv:1807.08145 and arXiv:1807.08159). (Received January 21, 2019)