The Hong Kong University of Science and Technology

Department of Mathematics

<u>Seminar on Probability</u>

Statistical physics of exponential random graphs

By

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<u>Abstract</u>

Exponential random graphs are powerful in the study of modern networks. By representing a complex global configuration through a set of tractable local features, these models seek to capture a wide variety of common network tendencies. This talk will look into the asymptotic structure of weighted exponential random graphs and formulate a quantitative theory of phase transitions. The main techniques that we use are variants of statistical physics (both equilibrium and non-equilibrium). Based on joint work with multiple collaborators.

Date: Tuesday, 27 November 2018

Time: 4:00p.m.-5:00p.m.

Venue: Room 4475, Academic Building, (near Lifts 25 & 26), HKUST

All are welcome!