

Department of Mathematics **The Chinese University of Hong Kong**

數學系

香港中文大學

Phone: (852) 3943 7988 • Fax: (852) 2603 5154 • Email: dept@math.cuhk.edu.hk (Math. Dept.) Room 220, Lady Shaw Building, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong

Seminar

An introduction to bordered sutured Floer homology

Dr. Mike Wong Louisiana State University

Abstract

Sutured Floer homology, defined by Juhasz, is a generalization of Heegaard Floer homology to 3-manifolds with a sutured boundary; certain flavors of link Floer homology and graph Floer homology can also be viewed in this framework. In another direction, Lipshitz, Ozsvath, and Thurston generalized Heegaard Floer homology to 3-manifolds with a parametrized boundary, which, most importantly, can be glued together along the parametrized boundary; this theory is called bordered Floer homology. In this expository talk, we will discuss Zarev's construction to combine the two theories into one, called bordered sutured Floer homology. This is a powerful invariant that allows cut-and-paste techniques in computing sutured Floer homology.

Date: 6 August 2018 (Monday)

Time: 1:30pm - 3:00pm

Venue: Room 222, Lady Shaw Building,

The Chinese University of Hong Kong, Shatin