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## Representation and Number Theory Seminar

## **Semi-affineness of Wrapped Invariants** on Affine Log Calabi-Yau Varieties

## Professor Daniel Pomerleano University of Massachusetts Boston

## **Abstract:**

A general expectation in mirror symmetry is that the mirror partner to an affine log Calabi-Yau variety is "semi-affine" (meaning it is proper over its affinization). We will discuss how the semi-affineness of the mirror can be seen directly as certain finiteness properties of Floer theoretic invariants of X (the symplectic cohomology and wrapped Fukaya category). As an application of these finiteness results, we will show that for maximally degenerate log Calabi-Yau varieties equipped with a "homological section," the wrapped Fukaya of X gives an (intrinsic) categorical crepant resolution of the affine variety  $Spec(SH^0(X))$ . This is based on https://arxiv.org/pdf/2103.01200.pdf

Date: March 16, 2021 (Tuesday)

Time: 9:00am - 10:00am (Hong Kong SAR)

Zoom link:

https://cuhk.zoom.us/j/97838822137?pwd=ZTVvSC9abmNjR3RCcS9FTzJNTVhXdz09

Meeting ID: 978 3882 2137

Passcode: sesame