

**Speaker:** Melissa Liu (Columbia University)

**Title:** Wall-crossing in abelian gauged linear sigma models

**Abstract:** The input data of a gauged linear sigma model (GLSM) consist of a GIT quotient of a complex vector space  $V$  by the linear action of a reductive algebraic group  $G$  (the gauge group) and a  $G$ -invariant polynomial function on  $V$  (the superpotential) which is quasi-homogeneous with respect to a  $\mathbb{C}^*$ -action ( $R$  symmetries) on  $V$ . GLSM invariants are virtual counts of curves in the critical locus of the superpotential. In this talk, I will describe GIT wall-crossing of genus-zero cohomological and K-theoretic GLSM invariants when the gauge group  $G$  is abelian, based on joint work with Konstantin Aleshkin.