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Ming Zhang* (zhangming@math.ubc.ca) and **Yang Zhou**. *K-theoretic quasimap wall-crossing for GIT quotients*. Preliminary report.

For a large class of GIT quotients $X=W//G$, Ciocan-Fontanine—Kim—Maulik and many others have developed the theory of epsilon-stable quasimaps. The conjectured wall-crossing formula of cohomological epsilon-stable quasimap invariants for all targets in all genera has been recently proved by Yang Zhou.

In this talk, we will introduce permutation-equivariant K-theoretic epsilon-stable quasimap invariants with level structure and prove their wall-crossing formulae for all targets in all genera. In particular, it will recover the genus-0 K-theoretic toric mirror theorem by Givental-Tonita and Givental, and the genus-0 mirror theorem for quantum K-theory with level structure by Ruan-Zhang. It is based on joint work with Yang Zhou. (Received September 16, 2019)