

Stable envelopes for critical loci

Wednesday 8 October 2025 10:00 (1 hour)

In a joint work with Andrei Okounkov, Yehao Zhou and Zijun Zhou. We introduce stable envelopes in critical cohomology and K-theory for symmetric quiver varieties with potentials and related geometries.

Critical stable envelopes are compatible with dimensional reductions, specializations, Hall products, and other geometric constructions. In particular, for tripled quivers with canonical cubic potentials, critical stable envelopes

reproduce those on Nakajima quiver varieties, constructed by Maulik and Okounkov.

If time permits, we also mention their applications to enumerative geometric problems. Applications to geometric representation theory will be mentioned in Yehao's talk.

Presenter: CAO, Yalong (Chinese Academy of Sciences)