



Mathematics and CS Seminar

Shifted Lagrange multipliers method

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Modern enumerative geometry is about integrals of cohomology classes against virtual fundamental classes of moduli spaces. When the perfect obstruction theory of a moduli space admits a cosection, the virtual fundamental class is localized to the zero locus of the cosection. When the cosection can be enhanced to a (-1)-shifted closed 1-form, the zero locus admits a (-2)-shifted symplectic structure and hence a virtual fundamental class due to a recent construction of Oh-Thomas. I will talk about a joint work with Hyeonjun Park where we prove that the two virtual fundamental classes coincide up to sign. When applied to a shifted form of Lagrange multipliers method, the result gives us an immediate proof of the quantum Lefschetz principle by Chang-Li.

Thursday, April 25, 2024 01:00pm - 03:00pm

Heinzel Seminar Room (I21.EG.101), Office Building West, ISTA



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