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## Pseudo-holomorphic curves with a fixed complex structure in positive symplectic manifolds

*Thursday, 2 October 2025 16:00 (1 hour)*

In this talk, I will show that fixed-domain Gromov–Witten invariants of a positive symplectic manifold (e.g., a smooth Fano variety) count  $J$ -holomorphic curves in  $X$  satisfying prescribed incidence conditions. This provides a symplectic analogue of a conjecture of Lian and Pandharipande, recently disproved in the algebraic setting by Beheshti, Lehmann, Lian, Riedl, Starr, and Tanimoto. The proof relies on constructing the fixed-domain Gromov–Witten pseudocycle without the use of inhomogeneous or domain-dependent perturbations, answering an old question posed by Ruan and Tian.

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