

Conference on New Challenges and Perspectives in Symplectic Field Theory

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BPS states in GW theory

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Abstract

Gromov-Witten theory concerns integration over the moduli space of holomorphic maps. The BPS state counts of Gopakumar and Vafa introduced almost 10 years ago suggest an approach to the GW theory of 3-folds via cohomology groups (rather than integrals).

I will discuss *recent work with A. Klemm and R. Thomas* related to these mysterious BPS state counts.