

Hurwitz numbers and moduli spaces of holomorphic curves

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Thursday, November 18, 2004

102 Bradley Hall, 4:00 pm
(Tea 3:30 pm Math Lounge)

Abstract

We will discuss the connection between the classical combinatorial problem of counting ramified coverings of a two-dimensional sphere and intersection theory on the moduli space of holomorphic curves with n marked points. This connection leads to a formula expressing the number of coverings as an integral of some characteristic classes of the moduli space. Applications include a new proof of the Witten conjecture (due to A. Okounkov and R. Pandharipande). Joint work with T. Ekedahl, S. Lando, and A. Vainshtein

This talk will be accessible to graduate students and advanced undergraduate students.