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Geometry, Topology, and Physics Seminar

The dilogarithm function

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Friday, October 24, 2017, 4:00 p.m.
Room 6635 South Hall

Abstract: This is the first of an occasional series of lectures explaining more of the details of the work on higher Chow groups, mirror symmetry, and hyperbolic 3-manifolds which I outlined two weeks ago.

The dilogarithm function has played an interesting role in various branches of mathematics over the past 25 years or so. It finds uses in number theory, in algebraic K-theory, in the study of hyperbolic manifolds, and in conformal field theory. The basic properties of Euler's dilogarithm function and its modern variants (e.g. the Bloch-Wigner function) will be surveyed. along with applications.

This seminar is part of the NSF/UCSB 'Research Training Group' in Topology and Geometry.
Information about future meetings can be found at http://www.math.ucsb.edu/~drm/GTPseminar/