

Prof. Paul Seide (Massachusetts Institute of Technology)

SAMUEL EILENBERG LECTURES

"Automorphisms and Fibrations in Symplectic and Noncommutative Geometry" In algebraic geometry, there are special theories for a space equipped with a function, or with a vector field, or a group action. Such geometric features allow one both to analyze the given space, and to introduce new objects and structures on it. Motivated by mirror symmetry, we will try to reconsider such features from the more general viewpoint of noncommutative geometry.
For instance, given an algebra A, thought of as corresponding to a noncommutative space, what is a function on A? What are the level sets of that function?

Symplectic geometry provides a rich source of situations where the answer to those questions is important, and makes a difference in concrete topological applications. **Tea will be served at 4pm in the Mathematics Department Room 508** Columbia University Department of Mathematics 2990 Broadway New York, NY 10027

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