

abstract

MARSTON MORSE LECTURES

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

During the last 10 years the results and ideas from my work on unipotent flows have been widely used and applied to various problems arising from number theory, spectral theory, ergodic theory, the theory of elliptic curves, moduli spaces, dynamics, etc In view of this it seems timely to present these results and ideas to a broad audience of mathematicians. Pursuing this goal my lectures will be intended mostly for nonspecialists.

In the first lecture I will formulate the results, discuss a number of applications and then outline the basic ideas involved in the proofs.

In subsequent lecture I will focus on applications (mostly by other authors) in more detail and show how the theory of unipotent flows arises in seemingly unrelated problems.