

abstract

MEMBERS SEMINAR

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

Semisimple Lie groups seem to be very rigid objects. In arithmetic situations the fact that a semisimple group may degenerate into a non-semisimple one in a family is well known. In geometric situations this phenomenon has not been applied that much, although some well known moduli problems can be formulated in a natural way using such families.

Pappas and Rapoport (motivated by a local analog - twisted loop groups) suggested studying moduli spaces of bundles related to such degenerations over curves and made a series of conjectures on the geometry of the corresponding moduli spaces of bundles.

In this talk I would like to motivate the setup of their conjectures by some explicit examples of degenerations and explain why the flexibility of this general setup can be very useful.