

DIFFERENTIAL GEOMETRY/PDE SEMINAR

WEDNESDAY, SEPTEMBER 12, 2007

PADELFORD C-401

11–NOON

Infinitesimal automorphisms of parabolic geometries

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I will start by outlining E. Cartan's idea to describe certain geometric structures as "curved analogs" of homogeneous spaces. Specializing to the case that the homogeneous space is a generalized flag variety, i.e. the quotient of a semisimple group by a parabolic subgroup, one obtains the so-called parabolic geometries. These contain well known geometries like conformal and CR structures as well as certain generic distributions and more exotic geometric structures. I will describe how the Cartan geometry picture quickly leads to results on automorphisms groups and infinitesimal automorphisms of such structures.

For more information about this seminar, visit the DG/PDE Seminar Web page (from the Math Department home page, www.math.washington.edu, follow the link **Seminars, Colloquia, and Conferences**).

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