ALGEBRA/COMBINATORICS/DIFFERENTIAL GEOMETRY/PDE SEMINAR

Wednesday, October 17, 2012 Padelford C-36 3:50PM-5PM

Schubert varieties as variations of Hodge structure

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I will describe recent work that characterizes the Schubert varieties that arise as variations of Hodge structure (VHS). I will also discuss the central role that these Schubert VHS play in our study of general VHS. In particular: (i) infinitesimally their orbits under the isotropy action 'span' the space of all VHS, yielding a complete description of the infinitesimal VHS; (ii) the cohomology classes dual to the Schubert VHS form an (integral) basis of the invariant characteristic cohomology associated to the system of PDE characterizing VHS.

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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