Queen's Algebraic Geometry — Seminar —

QUASIMAPS INTO HOMOGENEOUS SPACES AND STRAIGHTENING LAWS

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Abstract

Spaces of rational maps into homogeneous spaces is a subject of interest in various areas, including algebraic geometry, linear systems theory and mathematical physics. These spaces have a natural *Drinfel'd* compactification, or the space of *quasimaps*. We will describe the work of Sottile-Sturmfels in the case of quasimaps into the Grassmannian, and recent work on the space of quasimaps into the Lagrangian Grassmannian. In both cases the combinatorial structure of the defining equations is an essential ingredient. The results bear a striking similarity to what is known from the standard monomial theory of the homogeneous spaces themselves, suggesting possible future directions.

Monday, February 23, 2009 4:30pm – 5:30pm 319 Jeffery Hall