Analysis Seminar Thursday September 25, 2014

Jiri Lebl Oklahoma State University

Title: *Levi-flat hypersurfaces induced by a curve in the Grassmannian*

Abstract: Levi-flat hypersurfaces in projective space are an interesting and surprisingly difficult subject. I will talk about singular hypersurfaces, which exist (unlike those pesky nonsingular ones). In particular I will tackle the question of analogue of Chow's theorem for such hypersurfaces, or lack thereof. In fact, there exists a nonalgebraic Levi-flat hypersurface in two dimensional complex projective space induced by a nonalgebraic curve in the Grassmannian, a result easier said than done.