Felix Klein Seminar

UNIVERSITY OF NOTRE DAME
Department of Mathematics

Speaker: Owen Gwilliam
Northwestern University

Thursday, April 7, 2011
2:00 PM
125 Hayes-Healy Hall

Title: The Atiyah class and Chern character in derived geometry

Abstract:

Last week, Ryan Grady discussed the original appearance of the Atiyah class in complex geometry. In the first part of my talk, I will introduce dg manifolds (also known as Q-manifolds), which are a concrete version of "derived geometry," and will provide several natural examples of dg manifolds, aimed at exhibiting how they provide a convenient language that naturally combines geometry with homological constructions. The second part will sketch a construction of the Chern character of a smooth vector bundle using the Atiyah class in the setting of dg manifolds.