

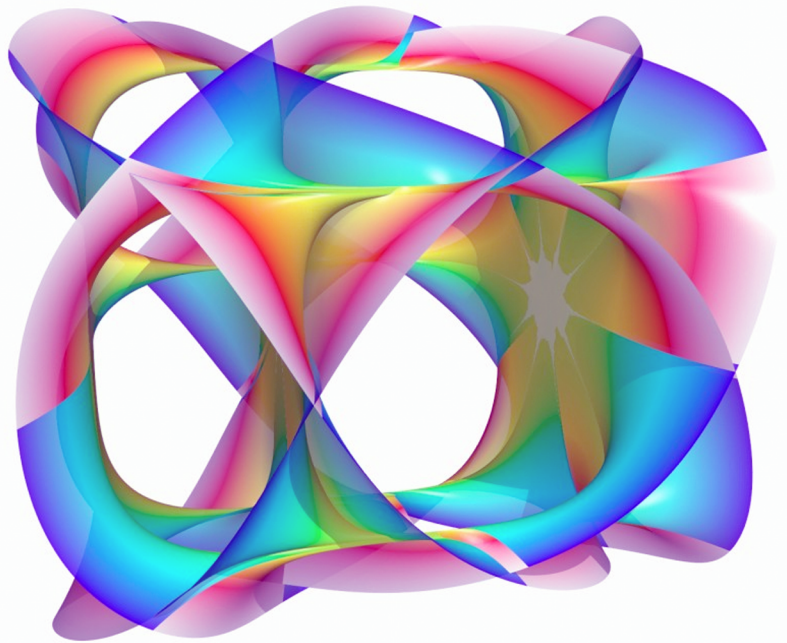
The Oliver Club

www.math.cornell.edu/~oliver/

Andrei Caldararu, University of Wisconsin-Madison

The Pfaffian-Grassmannian Derived Equivalence

String theory relates certain seemingly different manifolds through a relationship called mirror symmetry. Discovered about 25 years ago, this story is still very mysterious from a mathematical point of view. Despite the name, mirror symmetry is not entirely symmetric — several distinct spaces can be mirrors to a given one. When this happens it is expected that certain invariants of these “double mirrors” match up. For a long time the only known examples of double mirrors arose through a simple construction called a flop, which led to the conjecture that this would be a general phenomenon. In joint work with Lev Borisov we constructed the first counterexample to this, which I shall present. The talk will be accessible to a wide audience, in particular to graduate students.



Thursday, November 12, 2009
at 4:25 PM in 406 Malott Hall

Refreshments will be served at 3:55 PM in the Mathematics Department lounge (532 Malott Hall).