

The Oliver Club

www.math.cornell.edu/~oliver/

The Topology of Symplectic and Hyperkähler Quotients

*Symplectic and hyperkähler geometry lie at the crossroads of many exciting areas of research due to their relations to geometric representation theory, combinatorics, and certain areas of physics such as string theory and mirror symmetry. As often happens in mathematics, the presence of symmetry in these geometric structures — in this context, a **Hamiltonian G-action** for G a Lie group — turns out to be crucial in the computation of topological invariants, such as the Betti numbers or the cohomology ring, of symplectic and hyperkähler manifolds. I will give a bird's-eye, motivating overview of the subject and then give a survey of my recent results on the topic.*



Megumi Harada

McMaster University

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

Thursday, April 26, 2007
at 4:25 PM in 406 Malott Hall