## The Oliver Club

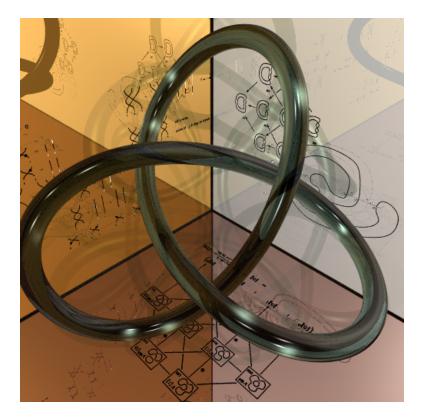
www.math.cornell.edu/~oliver/

## **Dylan Thurston**, Columbia and Cornell University *Heegaard Floer Homology*

Heegaard Floer homology is a powerful invariant of 3- and 4-manifolds. In 4 dimensions, Heegaard Floer homology (together with the Seiberg-Witten and Donaldson equations,

which are conjecturally equivalent), provides essentially the only technique for distinguishing smooth 4-manifolds. In 3 dimensions, it provides much geometric information, like the simplest representatives of a given homology class.

In this talk we will focus on recent progress in making Heegaard Floer homology more computable, including a complete algorithm for computing it for knots.



## Thursday, September 22, 2011 at 4:25 PM in 406 Malott Hall

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