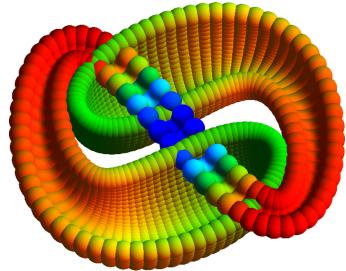
# Kieval Lecture

## Friday, September 25, 2015

#### Knots in Three and Four Dimensions

#### Dror Bar-Natan, University of Toronto

Much as we can understand 3-dimensional objects by staring at their pictures and x-ray images and slices in 2 dimensions, so can we understand 4-dimensional objects by staring at their pictures and x-ray images and slices in 3 dimensions, capitalizing on the fact that we understand 3 dimensions pretty well. So we will spend some time staring at and understanding various



2-dimensional views of a 3-dimensional elephant, and then even more simply, various 2-dimensional views of some 3-dimensional knots. This achieved, we'll take the leap and visualize some 4-dimensional knots by their various traces in 3-dimensional space, and if we still have time, we'll prove that these knots are really knotted.

More information is available at http://drorbn.net/kieval

### 4:30 PM - Bache Auditorium - 228 Malott Hall

Join us at 4:00 PM in 532 Malott Hall for refreshments before the talk.