Geometry, Groups and Dynamics/GEAR Seminar
(held at the Illinois hub of GEAR)

1:00 pm, Thursday, November 19, 2015, 243 Altgeld Hall
Yair Minsky (Yale University)
Fibrations, subsurfaces and triangulations

Abstract: When a hyperbolic 3-manifold fibers over the circle, the stable/unstable laminations of its monodromy map give us a model for its geometric structure. The features of this model are determined by the projections of these laminations into arc complexes of subsurfaces of the fiber. The quality of this model depends on the topological type of the fiber, and we do not have a good global understanding of how this structure behaves for arbitrary fibrations. As a kind of laboratory for testing such questions we consider the (typically infinitely many) different ways that a given 3-manifold can fiber over the circle, as organized by Thurston's norm. It turns out that, using Agol's veering triangulations, we can obtain some more precise answers. This is joint work with Sam Taylor.
Video