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

12:00 pm, Tuesday, November 14, 2017, 243 Altgeld Hall
Charles Frohman (University of Iowa)
Skeins and Characters
Skein theory is a K-theoretic like construction. Think of the underlying three- manifold as a ring, and a link in that manifold as a projective module. Crossings correspond to extensions of one module by another, and the skein relation says that the extension is equivalent to the direct sum of the two links that it extends. The skein module is the K-group from this relation. If the underlying three manifold is a cylinder over a surface, the links act like a category of bimodules, and the skein module is an algebra. In the talk, I will define the Kauffman bracket skein algebra and describe its properties.
Video