1116-57-1008 **Hugh Morton** and **Peter Samuelson*** (peter-samuelson@uiowa.edu). *The Homfly skein and elliptic Hall algebras.*

The Homflypt skein algebra of the torus is the vector space of (framed) links in the torus modulo the Homflypt skein relations. Stacking links makes this an algebra, and we describe a natural set of generators and relations.

The Hall algebra of a category has isomorphism classes of objects as elements and a product determined by extensions. The elliptic Hall algebra $E_{q,t}$ is the Hall algebra of the category of coherent sheaves over an elliptic curve in finite characteristic. A presentation of $E_{q,t}$ was given by Burban and Schiffmann, and we use this to show the skein algebra is isomorphic to $E_{q,q}$. (Received September 16, 2015)