

The Oliver Club

www.math.cornell.edu/~oliver/

Cluster Algebras, Poisson Structures, and Semiconductor Nets

I will discuss the definition of a cluster algebra, recently introduced by Fomin and Zelevinsky and a construction of a Poisson structure compatible with the cluster algebra structure. Examples includes coordinate rings of double Bruhat cells, decorated Teichmüller spaces and homogeneous coordinate rings of Grassmannians. In the latter case, a connection with A. Postnikov's map from semiconductor planar nets in a disk to a Grassmannian will be discussed, as well as its generalization to semiconductor nets in the annulus. (Based on joint work with M. Shapiro and A. Vainshtein)



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

**Thursday, November 2, 2006
at 4:25 PM in 406 Malott Hall**