1129-05-429   **Maitreyee C Kulkarni*** (`mkulka2@lsu.edu`), 3942 Gourrier Avenue Apt 209, Baton Rouge, LA 70808. *Cylinders over Dynkin digrams and cluster algebras.*

Let G be a Lie group of type ADE and P be a parabolic subgroup. It is known that there exists a cluster structure on the coordinate ring of the partial flag variety G/P (see the work of Geiss, Leclerc, and Schroer). Since then there has been a great deal of activity towards categorifying these cluster algebras. Jensen, King, and Su gave a direct categorification of the cluster structure on the homogeneous coordinate ring for Grassmannians (that is, when G is of type A and P is a maximal parabolic subgroup). In this setting, Baur, King, and Marsh gave an interpretation of this categorification in terms of dimer models. In this talk, I will give an analog of dimer models for groups in other types by introducing a technique called "constructing cylinders over Dynkin diagrams", which can (conjecturally) be used to generalize the result of Baur, King, and Marsh. (Received March 20, 2017)