## 1046-54-1247 **Jennifer M Franko\*** (frankoj2@scranton.edu), The University of Scranton, Department of Mathematics, St. Thomas Hall, 162, Scranton, PA 18510. *Finite Image Braid Group Representations from the Yang Baxter Equation.*

This talk considers the images of the braid group under representations afforded by the Yang Baxter equation when the solution is a nontrivial  $4 \ge 4$  matrix. Making the assumption that all the eigenvalues of the Yang Baxter solution are roots of unity, leads to the conclusion that all the images are finite. (Received September 15, 2008)