## 1070-57-302

Jesse Johnson and Maggy Tomova<sup>\*</sup> (maggy-tomova@uiowa.edu), 14 MacLean Hall, Iowa City, IA 52242. Flipping bridge surfaces and bounds on the stable bridge number.

We show that if K is a knot in  $S^3$  and  $\Sigma$  is a bridge sphere for K with high distance and 2n punctures, the number of perturbations of K required to interchange the two balls bounded by  $\Sigma$  via an isotopy is n. We also construct a knot with two different bridge spheres with 2n and 2n-1 bridges respectively for which any common perturbation has at least 3n-1 bridges. We generalize both of these results to bridge surfaces for knots in any 3-manifold. (Received February 15, 2011)