1037-57-303   **Stanislav Jabuka*** (`jabuka@unr.edu`), Department of Mathematics and Statistics, University of Nevada, Reno, NV 89557, and **Josh Greene**. *The slice-ribbon conjecture for 3-stranded pretzel knots.*

The slice-ribbon conjecture is a classical problem in knot theory which asserts that every smoothly slice knot is ribbon. While this conjecture goes back to at least the 1960s, the first substantial progress has only been made in 2006 when P. Lisca solved the conjecture for 2-bridge knots using tools from 4-dimensional gauge theory.

The talk will present an extension of both Lisca's results and his techniques and explain how they can be used to prove the slice-ribbon conjecture for 3-stranded pretzel knots. In parallel, we find new obstructions for certain Seifert fibered 3-manifolds to bound a rational homology 4-ball. The presented results are joint work with Josh Greene. (Received February 04, 2008)