

1020-46-190 **N. P. Brown*** (nbrown@math.psu.edu), Department of Mathematics, Penn State University,
State College, PA 16802. *The Cuntz Semigroup*. Preliminary report.

I'll define the Cuntz semigroup and describe how it has been used (by Andrew Toms) to produce some spectacular counterexamples to Elliott's classification program.

Then, I'll present some recent joint work with Francesc Perrera and Andrew Toms which relates the Cuntz semigroup to the Elliott invariant in a natural way. Time permitting, I'll discuss three applications: one is to Elliott's conjecture; the other two concern some old conjectures of Blackadar-Handelman. (Received August 28, 2006)