1025-51-239 **Ben Schmidt*** (schmidt@math.uchicago.edu), IL , and **Alvaro Pelayo**, MI. *Maximal Toric Ball Packings of Symplectic Toric Manifolds.* Preliminary report.

A 2n-dimensional closed symplectic manifold equipped with an effective and Hamiltonian action of an n-dimensional torus is known as a symplectic toric manifold. I'll discuss work in progress with A. Pelayo where we study the symplectic ball packing problem in a toral equivariant setting. Our main result so far asserts that each maximal density equivariant packing contains at least one equivariant ball not contained in a larger equivariant ball. (Received January 23, 2007)