VISAN Monica Symplectic non-squeezing for the cubic NLS on the plane

We prove that the flow of the cubic NLS in two dimensions cannot squeeze a ball in L^2 into a cylinder of lesser radius. This is a PDE analogue of Gromov's non-squeezing theorem for an infinite-dimensional Hamiltonian PDE in infinite volume. It is joint work with R. Killip and X. Zhang.