1120-57-177   **Luke Morgan Williams*** (`lukewilliams@math.ksu.edu`). *On non-Stein rational balls.* Preliminary report.

The existence of a Stein structure on a smooth 4-manifold provides powerful constraints on it's (smooth) topology. These constraints can be leveraged to obstruct a given 4-manifold from being Stein. Unfortunately, many of these obstructions break down in the case of rational balls. I will describe methods that can overcome this breakdown and allow the construction of infinite families of rational balls that cannot be Stein. (Received February 21, 2016)