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Embedding (or not) rational balls in $\mathbb{C}P^2$

Motivated by results of Hacking and Prokhorov and of Evans and Smith, we study embeddings of rational balls in $\mathbb{C}P^2$. Our goal is to better understand disjoint embeddings of collections of rational homology disc smoothings of cyclic quotient singularities, that is rational balls whose boundary is a lens space. In the talks I will discuss a bit of context, some constructions, and some obstructions (mostly coming from gauge theory). This is joint work in progress with Brendan Owens.