

## Obstruction flat rigidity of the standard 3-sphere

Peter Ebenfelt

University of California, San Diego

This talk concerns joint work with Sean Curry. In previous work, Curry and Ebenfelt has shown that the standard CR 3-sphere in  $\mathbb{C}^2$  is *obstruction flat rigid* among deformations within  $\mathbb{C}^2$ , i.e., there is a neighborhood of the standard CR structure on  $S^3$  such that an embeddable deformed structure is obstruction flat if and only if the structure is CR equivalent to the standard structure. In this talk, we shall discuss recent work that shows that the standard CR  $S^3$  is in fact obstruction flat rigid among *all* deformations. The definition of obstruction flatness and its significance will be explained in the talk.