Olga Plamenevskaya and Laura Starkston* (lstarkston@math.ucdavis.edu). 

Unexpected Stein fillings and plane curve arrangements.

We use singular braided symplectic surfaces in $\mathbb{C}^2$ in comparison with algebraic curves in $\mathbb{C}^2$ in order to exemplify differences between Stein fillings and algebraic deformations of a surface singularity. We work with Lefschetz fibrations and open book decompositions arising naturally from the projection of $\mathbb{C}^2$ to $\mathbb{C}$. We develop a symplectic analogue to results in the complex algebraic setting by de Jong and van Straten. (Received August 17, 2020)