## 1139-57-167 Nathaniel Bottman\* (nbottman@math.ias.edu). Moduli spaces of quilted disks mapping to $\mathbb{CP}^1$ and $\mathbb{CP}^2$ . Preliminary report.

There is a monotone Lagrangian  $\Lambda \subset (\mathbb{CP}^1)^- \times \mathbb{CP}^2$  coming from the action of  $S^1$  on  $\mathbb{CP}^2$  that rotates the last homogeneous coordinate. By work of Wehrheim and Woodward, we should expect that  $\Lambda$  induces a functor  $F_{\Lambda}$ : Fuk $(\mathbb{CP}^1) \to$  Fuk $(\mathbb{CP}^2)$ between monotone Fukaya categories, which sends  $L \subset \mathbb{CP}^1$  to a circle bundle over L and which is defined on the morphism level in terms of moduli spaces of quilted disks with one patch mapping to  $\mathbb{CP}^1$  and one to  $\mathbb{CP}^2$ . I will explain how to classify these quilted disks, and describe some features of the compactified moduli spaces thereof. Time and circumstances permitting, I may talk about more general examples of quilted disks mapping to a toric manifold and its reduction by a Hamiltonian action. (Received February 07, 2018)