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08540. *Lagrangian correspondences and a Floer field theory*. Preliminary report.

This is joint work with Chris Woodward. We define a composition functor for generalized Donaldson categories of Lagrangian correspondences and show that it agrees with geometric composition in the case that the composition is embedded. As an application, we aim to construct a category-valued Floer TFT in 2+1 dimensions, or in other words, functor valued invariants of 3-dimensional cobordisms. (Received February 05, 2006)