Ian Cy Shipman*, Department of Mathematics, University of Chicago, 5734 S University Ave, Chicago, IL 60637. Landau-Ginzburg B-Models and Higher Deformations of Projective Hypersurfaces. Preliminary report.

A famous construction of Barannikov and Kontsevich defines a Frobenius manifold structure on the moduli space of deformation of a Calabi-Yau manifold. In the case of a projective hypersurface we will describe this structure using so called "matrix factorizations". (Received January 25, 2010)