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Catherine Kendall Asaro Cannizzo* (ccannizzo@scgp.stonybrook.edu). *Homological mirror symmetry for a genus two curve.*

We prove a homological mirror symmetry result for a one-parameter family of genus 2 curves obtained by scaling a specific complex structure. First we describe the B-model genus 2 curve in a 4-torus and the geometric construction of the generalized SYZ mirror. Then we set up the Fukaya-Seidel category on the mirror. Finally we will see the main algebraic result on homogenous coordinate rings, i.e. the HMS result on the level of cohomology. The method involves first considering mirror symmetry for the 4-torus, then restricting to the hypersurface genus 2 curve and extending to a mirror Landau-Ginzburg model with fiber the mirror 4-torus. This talk is based on the speaker's PhD thesis under Professor Denis Auroux. It also gives the background for the next talk by Heather Lee. (Received January 09, 2021)