

1154-14-1953 **Nathan Priddis*** (priddis@math.byu.edu), 275 TMCB, Brigham Young University, Provo, UT 84604. *Mirror Symmetry for nonabelian Landau-Ginzburg models.*

Mirror symmetry is a phenomenon that has inspired many deep results in the area of algebraic geometry in the past several decades. Mirror symmetry essentially says that the A-model is equivalent in some particular way to the B-model. In the realm of mirror symmetry, one can consider what are known as Landau-Ginzburg (LG) models—a counterpart to the much-studied Calabi-Yau manifolds. LG models are built from the data of a pair (W, G) , where W is a quasihomogeneous potential function and G is a group of symmetries of W . In the past, much has been written about LG mirror symmetry, when G is a group comprised of what are called diagonal symmetries—meaning they are represented as diagonal matrices. More recently, there has been interest in understanding mirror symmetry for the case when G is no longer comprised of diagonal symmetries, but may in fact be nonabelian. We refer to these as nonabelian LG models. In this talk we will discuss mirror symmetry for LG models, and describe a conjectural construction of mirror symmetry for nonabelian LG models, together with some early results supporting this conjectured relationship between the LG A-model and the LG B-model. (Received September 16, 2019)