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Michael Thaddeus* (thaddeus@math.columbia.edu), Dept. of Mathematics, Columbia University, 2990 Broadway, New York, NY N.Y. 10027. *Mirror Symmetry for Finite Quotients of Tori.*

The Strominger-Yau-Zaslow version of mirror symmetry calls for a Calabi-Yau and its mirror to be fibered by dual families of special Lagrangian tori. We will exhibit a large class of examples where such dual families exist for straightforward reasons. They are quotients of an abelian variety by a finite group acting by automorphisms and translations. The orbifold Hodge numbers can be calculated and seen to satisfy the mirror relationship. However, a complicating feature is the "turning on of the B-field": we must work with a flat $U(1)$ -gerbe and take cohomology with the corresponding local coefficients. (Received September 06, 2006)