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Mark Gross* (mgross@math.ucsd.edu), **Ludmil Katzarkov** and **Helge Ruddat**. *Towards mirror symmetry for varieties of general type.*

We give a proposal for mirrors of general type varieties. In the context considered here, we look at mirrors to hypersurfaces S of dimension d in smooth toric varieties lying in ample linear systems. We construct a mirror \check{S} of the same dimension; this in general a reducible scheme, which comes along with a perverse sheaf $\mathcal{F}_{\check{S}}$. After defining suitable Hodge numbers, we are able to prove the expected identity $h^{p,q}(S) = h^{d-p,q}(\mathcal{F}_{\check{S}})$. This suggests that by broadening the category in which we consider possible mirrors to live, there will be a useful theory of mirror symmetry for such varieties. (Received December 05, 2011)