1020-14-214 **Joshua P Mullet*** (joshykins@gmail.com). *Fibered Calabi-Yau Varieties and Toric Varieties.*
Following the "Explicit Birational Geometry" program of Corti, Reid, et al., we classify all Calabi-Yau threefolds fibered over the projective line whose general fiber is a weighted K3-hypersurface in weighted projective 4-space. We rely heavily on techniques from toric geometry in our classification. Finally, we discuss how our threefolds can be related to Batyrev's mirror symmetry construction. (Received August 28, 2006)