Ravi Jagadeesan* (ravi.jagadeesan@gmail.com). Crepant resolutions of \(\mathbb{Q}\)-factorial threefolds with compound Du Val singularities.

We study the set of crepant resolutions of \(\mathbb{Q}\)-factorial threefolds with compound Du Val singularities. We derive sufficient conditions for the Kawamata–Kollár–Mori–Reid decomposition of the relative movable cone into relative ample cones to be the decomposition of a cone into chambers for a hyperplane arrangement. Under our sufficient conditions, the hyperplane arrangement can be determined by computing intersection products between exceptional curves and divisors on any single crepant resolution. We illustrate our results by considering the Weierstrass models of elliptic fibrations arising from Miranda collisions with non-Kodaira fibers. Many of our results extend to the set of crepant partial resolutions with \(\mathbb{Q}\)-factorial terminal singularities. (Received September 19, 2018)