K3 surfaces and abelian surfaces are topologically bounded, but they are algebraically unbounded. Reid-Iano Fletcher gave a list of 95 weighted K3 hypersurfaces. We can ask whether K3 or abelian surfaces which can be realized as hypersurfaces in a mildly singular space are bounded or not.

In this talk, I will explain that such hypersurfaces form a birational bounded family. I'll also give some examples and generalizations.