

This talk is about a joint work with Martin Kalck and David Ploog.

An object  $F$  in a triangulated category is called  $d$ -spherelike, if its endomorphism algebra is isomorphic to the cohomology of a  $d$ -sphere. If one also asks for  $F$  to be a  $d$ -Calabi-Yau object, one would arrive at the well-known notion of a  $d$ -spherical object. For such an object, Seidel and Thomas defined a functor, the so-called spherical twist, which is an auto-equivalence.

Without this CY-condition, we can still show that there is a maximal triangulated subcategory, where  $F$  becomes spherical -- the spherical subcategory associated to  $F$ .

Besides speaking about its basic properties, I will also give some geometric examples.