Spherelike objects

David Ploog (Universität Bonn)

Exceptional objects in triangulated categories are well-understood by now, the same is true for spherical objects. In this report on joint work with A. Hochenegger and M. Kalck we explain that objects with 2-dimensional endomorphism algebras (i.e. spherical objects lacking the Calabi-Yau condition) have an intrinsic meaning, too. Such "spherelike" objects occur in interesting, algebraic examples. Moreover, they can be used to define a new invariant of triangulated categories, the spherelike poset.