
MARCY ROBERTSON, University of Western Ontario
On Topological Triangulated Orbit Categories

In 2005, Keller showed that the orbit category associated to the bounded derived category of a hereditary category under an auto equivalence is triangulated. As an application he proved that the cluster category is triangulated. We show that this theorem generalizes to triangulated categories with topological origin (i.e. the homotopy category of a stable model category). As an application we construct a topological triangulated category which models the cluster category. This is joint work with Andrew Salch.