

Young Women in Topology Meeting 2013
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Talk 5:
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Topological Triangulated Orbit Categories

In 2005, Keller showed that the orbit category associated to the bounded derived category of a hereditary category under an autoequivalence 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 triangulated categories which model the cluster category but are of a purely topological origin.