

# Subcategories of triangulated categories and localization

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In this talk, we introduce relations between subcategories of a triangulated category  $\mathcal{D}$  and its localizations. First, we show the one to one correspondance between localizations of  $\mathcal{D}$  and pairs  $(\mathcal{U}, \mathcal{V})$  of full triangulated subcategories, which are called stable  $t$ -structures. Next, we show the one to one correspondance between recollements of  $\mathcal{D}$  and successive stable  $t$ -structures  $(\mathcal{U}, \mathcal{V}), (\mathcal{V}, \mathcal{W})$ . Moreover, we introduce the notion of polygons of recollements of  $\mathcal{D}$  as successive and recursive stable  $t$ -structures, and give some examples where there are polygons of recollements.