Torsion classes and t-structures in higher homological algebra

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n-homological algebra was initiated by Iyama via his notion of n-cluster tilting subcategories. It was turned into an abstract theory by the definition of n-abelian categories (Jasso) and $(n+2)$-angulated categories (Geiss-Keller-Oppermann).

The notion of torsion classes can be generalised to n-abelian and $(n+2)$-angulated categories, with t-structures in $(n+2)$-angulated categories arising as a special case. This will be explained in the talk, along with an n-homological version of the bijection between torsion classes and intermediate t-structures. In the classic case of 1-homological algebra, this is due to Happel-Reiten-Smalø.