

Workshop on

Higher Dimensional Auslander-Reiten Theory, May 7-9, 2013, Isfahan, Iran

n-representation Finite Algebras and n-representation Infinite Algebras
(5 Lectures)

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We introduce two classes of finite dimensional algebras of global dimension n : n -representation finite (n -RF) algebras and n -representation infinite (n -RI) algebras. n -RF algebras are defined by existence of n -cluster tilting modules, while n -RI algebras are defined by their special behavior of Nakayama-Serre functors. We discuss their basic properties and examples: n -AR translations, preprojective algebras, n -APR tilting, connection with cluster categories, n -regular modules, representation dimension and so on.