

1084-16-53

Liping Li* (lixxx480@umn.edu), Department of Mathematics, University of California, Riverside, Riverside, CA 92507. *Representations of Finite EI Categories.*

Finite EI categories are small categories with finitely many objects such that every endomorphism is an isomorphism. Each of them can be regarded as a combination of an underlying poset and several finite groups. Examples of finite EI categories include finite groups, posets, fusion systems and orbit categories. In this talk we introduce the background of representations of finite EI categories, characterize finite EI categories with hereditary category algebras, and study in details the representation types of finite EI categories with two objects. (Received August 14, 2012)