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İSTANBUL DISCRETE MATHEMATICS MEETINGS

# ALGEBRAS AND GRAPHS

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## Abstract

A combinatorial method used in the theory of Artin algebras is to visualize the algebra as a directed graph (quiver). The vertices are the idempotents of the Artin algebra and the edges are the algebra maps between the subalgebras of the Artin algebra. This mainstream technique allows us to translate the problem in Artin algebras to quivers.

We will also mention Cluster algebras -that are algebras which are generated by a given quiver and some indeterminants- and how Auslander-Reiten Quivers (another combinatorial tool) are used in their study.

**Date:** Friday, May 13, 2011

**Time:** 11:00

**Place:** IMBM Seminar Room, Boğaziçi University