

Universidad Complutense de Madrid
Facultad de Ciencias Matemáticas
Departamento de Álgebra

Teléfono: 91 394 45 70, Fax: 91 394 46 62
Correo electrónico: Algebra@mat.ucm.es

SEMINARIO DE GEOMETRÍA ALGEBRAICA

Viernes 21 de setiembre de 2012, **14:00**, Seminario 238

Akira Ishii

Universidad de Hiroshima

Impartirá la conferencia

Dimer models and crepant solutions

Resumen.

A dimer model is a bipartite graph on a real 2-torus, whose “dual” is a quiver with relations. It determines a lattice polygon in some natural way. If a dimer model satisfies *consistency* condition, the quiver with relations gives commutative/non-commutative crepant resolutions of the 3-dimensional affine Gorenstein toric variety associated with the cone over the lattice polygon. The 3-dimensional abelian McKay correspondence can be seen as a special case of this story and a new proof can be given in this framework.