Contribution ID: **24** Type: **not specified**

8/14 [Yusuke Nakajima] Combinatorial mutations of polygons via dimer models

In this talk, I consider a dimer model on the real two-torus T, which is a bipartite graph described on T.
For a dimer model, we can assign the lattice polygon, and a dimer model enjoys rich information regarding toric geometry associated to such a polygon.
On the other hand, there is the operation called the combinatorial mutation of a polytope, which makes a given polytope another one.
This mutation is important to understand mirror partners for Fano manifolds.
Under these backgrounds, I expect that there is a certain operation for a dimer model that induces the combinatorial mutation of the associated polygon.
In my talk, I will introduce the operation which I call the deformation of a dimer model, and show that this operation realizes my expectation.
This talk is based on a joint work with A. Higashitani.