1062-16-274 **Daniel Labardini-Fragoso\*** (labardini-fra.d@neu.edu), 360 Huntington Ave, Department of Mathematics, 567 Lake Hall, Boston, MA 02115. *Quivers with potentials and representations on* triangulated surfaces.

Every triangulation  $\tau$  of a surface gives rise to a quiver with potential (QP) in a natural and explicit way. Furthermore, each arc on the surface gives rise to a representation of the QP associated to  $\tau$ . In this talk we will present these constructions and discuss their behavior with respect to flips of triangulations and Derksen-Weyman-Zelevinsky's QP mutation. (Received August 10, 2010)