1106-13-2372 **Kiyoshi Igusa**, Waltham, MA, **Kent Orr**, Blumington, IN, **Gordana Todorov*** (g.todorov@neu.edu), Boston, MA 02115, and **Jerzy Weyman**, Storrs, CT. *Picture groups and Cluster theory.* Preliminary report.

To each modulated quiver $Q$ of finite Dynkin type we associate a "picture" defined using domains of semi-invariants (stability conditions). To each such picture we associate a group $G(Q)$, called "picture group". Also, to the quiver $Q$ we associate a cubical category $C(Q)$, called "cluster morphism category", which is defined in terms of wide subcategories and cluster tilting objects. Denote the classifying space of the cluster morphism category by $X(Q)$. We show that the space $X(Q)$ is $K(\pi, 1)$, i.e. has only one non-zero homotopy group $\pi_1$, and furthermore this group is isomorphic to the picture group $G(Q)$.

In another paper we also show that maximal green sequences correspond to positive expressions of Coxeter in the picture group $G(Q)$. (Received September 16, 2014)