

Given a skew-symmetric non-integer (real) matrix, one can construct a quiver with non-integer weights of arrows. Such a quiver can be mutated according to usual rules of quiver mutation introduced within the theory of cluster algebras by Fomin and Zelevinsky. We classify non-integer quivers of finite mutation type and prove that all of them admit some geometric interpretation (either related to orbifolds or to reflection groups). In particular, the reflection group construction gives rise to the notion of non-integer quivers of finite and affine types. We also study exchange graphs of quivers of finite and affine types in rank 3. The talk is based on joint works with Pavel Tumarkin and Philipp Lampe.