RALF SCHIFFLER, University of Connecticut

Cluster algebras from surfaces

Cluster algebras from surfaces are a special type of cluster algebras where the clusters of the cluster algebra are in bijection with triangulations of a Riemann surface with boundary and marked points. This class of cluster algebras contains for example the Dynkin types A, D and the Euclidean types \tilde{A}, \tilde{D} , but these are only the easiest examples and the whole class is significantly bigger.

In this talk I will explain how one can use the surface to perform explicit computations in the cluster algebra, including explicit formulas for the cluster variables and positivity results.