Quiver representations and cluster algebras

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In these lectures, we will give an introduction to representations of quivers and show how they can be used in the study of cluster algebras. A central role will be played by the Caldero-Chapoton map, which takes a quiver representation to an element of the (upper) cluster algebra. We will study this map in various settings: module categories, cluster categories and decorated representations of Jacobi algebras.