1128-16-316   **Sharon Henzler***, shenzler@zagmail.gonzaga.edu, and **Cameron Healy**, chealy@zagmail.gonzaga.edu. *Cluster algebras and their connection to triangulated n-gons and Coxeter groups.*

Although cluster algebras seem abstract at first glance and unrelated to the modern world of mathematics, today the theory of cluster algebras is connected to various fields of mathematics including coordinate rings of Grassmannians, quiver representations, Teichmuller theory, invariant theory, tropical calculus, Poisson geometry, etc. In this poster, we will introduce cluster algebras, give the definition of cluster algebra, explain the example of triangulation of an n-gon, make the connection with quiver mutations, and introduce and explain associahedrons. (Received February 28, 2017)