## 1116-13-2489 Greg Muller\* (morilac@umich.edu), Jenna Rajchgot and Bradley Zykoski. Lower bound cluster algebras: presentation and properties.

Cluster algebras are generated by a set of *cluster variables* which are produced by a recursive process called *mutation*. Unfortunately, these generating sets are often infinite, even when the algebra can be finitely generated. One workaround is to truncate the recursive process after a finite number of steps; the resulting algebra is called a *lower bound cluster algebra*.

This talk will review recent work which produced a uniform presentation of every lower bound cluster algebra. We consider a degeneration of the ideal of relations, which allows us to use techniques from combinatorics to prove that lower bound cluster algebras are always normal and Cohen-Macaulay. (Received September 22, 2015)