## 1125-05-661

## Emily Gunawan<sup>\*</sup> (egunawan@umn.edu), 800 West College Avenue, Saint Peter, MN 56082, and Gregg Musiker and Hannah Vogel. Cluster algebraic interpretation of infinite friezes. Preliminary report.

Originally studied by Conway and Coxeter, friezes appeared in various recreational mathematics publications in the 1970s. We construct a periodic infinite frieze using a class of peripheral elements of a cluster algebra of type D or affine A. We discover new symmetries and formulas relating the entries of this frieze and so-called bracelets. We also present a correspondence between Broline, Crowe and Isaacs's classical matching tuples (which is a generalization of Conway and Coxeter's work) and various recent combinatorial interpretations of elements of cluster algebras from surfaces. (Received September 15, 2016)