1035-05-460   **Kristen DiGiacomo**, **Gary Gordon**, **Garth Isaak**, **Chor Ham Lam**, **Joe Tenini** and **Olga Turanova*** (`ot2130@barnard.edu`). *Non-negative expressions of certain matrix minors.* Preliminary report.

In a 2001 paper, "Cluster Algebras I: Foundations",Fomin and Zelevinsky introduced cluster algebras, which are closely related to certain collections of matrix minors. We concentrate on certain collections of minors, so-called 'chamber clusters.' Given a specific chamber cluster, one important goal of the developing field is to show that any matrix minor may be expressed as a subtraction-free Laurent expression that uses only the minors in the given chamber cluster. We prove this result for chamber clusters derived from 2 x n matrices. We take advantage of the fact that chamber clusters can be represented via 'double wiring diagrams,' and we use these diagrams to obtain our expressions. (Received September 07, 2007)

1