1073-05-186          **Amanda Ruiz\*** (`aruiz@math.binghamton.edu`). *Realizations of Complex Matroids.*

Complex matroids are combinatorial objects, recently defined by Anderson and Delucchi, that play the same role for complex vector spaces as oriented matroids do for real vector spaces. A complex matroid is a matroid with additional structure that generalizes orientation.

According to Mnëv's Universality Theorem, for those complex matroids which are complexified oriented matroids, the realization space can be arbitrarily complicated. For all other complex matroids, the realizations are rigid; that is, the realization space is a single point. (Received August 01, 2011)