1086-13-1596   **Kuei-Nuan Lin** and **Jason McCullough*** (`jmccullough@msri.org`). *Hypergraphs and Regularity of Squarefree Monomial Ideals.* Preliminary report.

We define a new combinatorial object, which we call a labeled hypergraph, associated to every squarefree monomial ideal. Using this new object, we derive combinatorial ways of computing formulas for Castelnuovo-Mumford regularity of large classes of squarefree monomial ideals. We also obtain more general upper bounds and some tighter results for one-dimensional hypergraphs. (Received September 23, 2012)