1145-05-1321 **Zhexiu Tu*** (`tuzhexiu@gmail.com`). *Circuit axiomatizations of symplectic matroids.*

One generalization of ordinary matroids is symplectic matroids. While symplectic matroids were initially defined by their collections of bases, there has been no cryptomorphic definition of symplectic matroids in terms of circuits. We give a definition of symplectic matroids by collections of circuits. As an application, we construct a class of examples of symplectic matroids from graphs in terms of circuits. (Received September 24, 2018)