1145-11-1410   **Alexander J Barrios*** (`abarrios@carleton.edu`), Carleton College, Department of Mathematics and Statistics, One North College Street, Northfield, MN 55057. *Minimal Models of Rational Elliptic Curves with non-Trivial Torsion.*

The Frey curve $y^2 = x(x + a)(x - b)$ for relatively prime integers a and b comes equipped with an easily computable minimal discriminant. In this talk, we will extend the ideas of the Frey curve by classifying the minimal discriminant of all rational elliptic curves with non-trivial torsion. (Received September 21, 2018)