Jean S. Joseph* (jjose107@fau.edu). Order Type of the Rational Numbers.

In 1895, Georg Cantor characterized the order type of \( \mathbb{Q} \). A nice consequence of that characterization is that \( \mathbb{Q} \times \mathbb{Q} \) with the lexicographic order is isomorphic to \( \mathbb{Q} \). In this talk, we will present an algorithmic version of Cantor’s theorem that has a constructive proof. (Received September 24, 2017)