1070-01-9 **Steven H Weintraub*** (shw2@lehigh.edu), Dept. of Mathematics, Lehigh University, Bethlehem, PA 18015-3174. On Legendre's Work on the Law of Quadratic Reciprocity.

Legendre was the first to state the law of quadratic reciprocity in the form that we know it, and he was able to prove it in some but not all cases, with the first complete proof being given by Gauss in his *Disquisitiones Arithmeticae* in 1801. In this talk we trace the evolution of Legendre's work on quadratic reciprocity in his four great works on number theory, dating from 1785, 1797, 1808, and 1830 respectively. (Received October 08, 2010)