

1106-11-2457

**K. McMurdy\*** ([kmcmurdy@ramapo.edu](mailto:kmcmurdy@ramapo.edu)), [kmcmurdy@ramapo.edu](mailto:kmcmurdy@ramapo.edu), and **N. Jones** and **J. Brau**.

*Elliptic Curves with Non-abelian Entanglement Fields.* Preliminary report.

For a fixed elliptic curve,  $E$ , over the rational numbers, define an entanglement field for  $E$  to be the intersection between  $\mathbb{Q}(E[m_1])$  and  $\mathbb{Q}(E[m_2])$ , where  $m_1$  and  $m_2$  are relatively prime. In this talk, we will discuss our ongoing efforts to classify, using explicit methods, entanglement fields which are non-abelian over the rational numbers. These results are related to statistical aspects of the arithmetic of elliptic curves. (Received September 16, 2014)