## 1125-13-600

Scott T Chapman<sup>\*</sup> (scott.chapman@shsu.edu), Sam Houston State University, Department of Mathematics and Statistics, Box 2206, Huntsville, TX 77341. *REU projects involving non-unique factorization in integral domains and monoids: Past, Present, and Future.* Preliminary report.

Since the late 1990's, REU projects involving the theory of non-unique factorizations in integral domains and monoids have helped introduce dozens of undergraduate students to the world of mathematical research. In this talk, I will outline the background material necessary for a student to begin such a project. Several results from past projects will be highlighted, some of which were recently completed. I will close with a list of potential problems appropriate for future REU students. (Received September 07, 2016)