1067-60-1785   **Chelsea R Ross*** (`zcrr23@goldmail.etsu.edu`) and **Brooks E Smith** (`bsmith26@nd.edu`).
Predictive Methods in Coupon Collection. Preliminary report.

Given a series of "n" coupons and their respective probabilities, finding the expected time to collect at least one of each coupon is a problem that has been studied thoroughly in many forms. At the 2010 ETSU REU, the inverse to this problem was studied: given a full coupon collection, make accurate predictions about the probability of each coupon. The frequency method is known on average to underestimate the probabilities of coupons in certain positions, such as the final coupon collected. This presentation gives and overview of our statistical findings concerning the efficacy of various predictive methods, as well as some theoretical justifications for the methods chosen to be tested. (Received September 22, 2010)