Abstract Submitted
for the TSF17 Meeting of
The American Physical Society

Comparing the Dynamics of Fake News and Real News on Social Media PARKER HAGGERTY, DR. HANA DOBROVOLNY, Texas Christian University — The widespread adaptation of social media has had a profound impact on how news spreads, regardless of its veracity. We use a nonlinear mathematical model to compare the dynamics of real news stories and fake news stories on twitter. We adapt the concept of the Basic Reproductive Number- a measure of how infectious a virus is- as the primary means for this comparison. In order to collect data we use python to search twitter for hashtags relating to a specific news story, and then count the amount of tweets per day to use that hashtag. We fit this data to our model to calculate the Basic Reproductive Number, and then analyze and discuss our results.

Parker Haggerty
Texas Christian University

Date submitted: 19 Sep 2017 Electronic form version 1.4