1145-91-1625   **Carey Caginalp*** (`carey_caginalp@alumni.brown.edu`). *A Dynamical Systems Approach to Cryptocurrency.*

Recently, assets known as cryptocurrencies have come to the fore of public interest. Despite the fact that they have no underlying value, they have seen a market capitalization that is an increasing fraction of the world economy. I model these assets from the perspective of asset flow equations developed by Caginalp and Balenovich, and investigate the key question of stability. I will illuminate the role of different factors such as types of investor sentiment and liquidity through several versions of the model. I will also describe how one introduces multiple timescales to more closely match real-life scenarios whereby market participants often react more quickly to certain pieces of information than others. (Received September 23, 2018)