1117-05-536   **Angela S. Hicks***, ashicks@stanford.edu. *A Symmetric function from a Sandpile model.*
We will introduce two (not obviously related) statistics on recurrent configurations in the sandpile model for the complete graph. Summing over these recurrent configurations, looking at a q-t weight by these statistics, we get a q-t symmetric polynomial. After assigning a set to each recurrent configuration in a natural way, we can add a Gessel quasisymmetric function to each term; the result is surprisingly schur positive. We'll discuss the indirect proof, as well as how it significantly simplifies the proof of a similar conjecture of Dukes and LeBorgne about recurrent configurations in complete bipartite graphs. (Received January 19, 2016)