## 1163-37-1403 **Subhadip Chowdhury\*** (schowdhury@wooster.edu). Rationality and Rigidity of Extremal Actions of Free Group on the Circle.

We will discuss some interesting rationality and rigidity properties of Calegari-Walker ziggurats, which are graphs of extremal rotation numbers associated with positive words in free groups. We will provide an explicit formula for the fringe fractals and prove conjectured bounds affirmatively for interior points in specific cases. We will also look into strategies for exploring the case of a general word. (Received September 15, 2020)