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Ethan Farber* (farbere@bc.edu). *A Farey tree structure on a family of pseudo-Anosov braids.*

Under the right conditions, an expanding interval map can be realized as the train track map of a pseudo-Anosov braid. In particular, the family of such maps with two critical values is parameterized by the rationals in the open interval $(0,1)$. We investigate this parameterization, showing that it in fact carries the structure of the Farey tree. In this talk, I will describe some of the fruit born of this structure. For example, the rational parameter grows monotonically in the dilatation of the braid, and these dilatations are “eventually” Salem numbers, in a suitable sense. Given the time, we will also investigate the structure of the set of Galois conjugates of these dilatations. (Received January 23, 2022)