1086-37-1095 Sarah Koch and Roland Roeder* (rroeder@math.iupui.edu). Postcritically finite rational mappings of $\overline{\mathcal{M}_{0,n}}$ arising from Thurston's Theorem.

We study a family of maps $F_d : \overline{\mathcal{M}_{0,n}} \dashrightarrow \overline{\mathcal{M}_{0,n}}$ which arise as moduli space maps in the context of Thurston's topological characterization of rational maps. The space $\overline{\mathcal{M}_{0,n}}$ is the Deligne-Mumford compactification of the moduli space of npoints on the Riemann sphere. It is isomorphic to an iterated blow-up of \mathbb{P}^{n-3} . The maps F_d are rational and postcritically finite; each one has a nonempty indeterminacy set. Each map F_d is constructed from a simple combinatorial procedure coming from Thurston's theorem. Using this, we can readily analyze the dynamical behavior; in particular, algebraic stability, dynamical degrees, and maximal invariant cohomology class, etc. (Received September 18, 2012)