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Dynamical Belyi Maps.

We study the dynamical properties of a large class of rational maps on \mathbb{P}^1 with exactly three ramification points. We explicitly construct two infinite families of such maps and in doing so, we answer a question of Silverman about the number of conservative polynomials of degree d defined over \mathbb{Q} . We also prove a result about the reduction of such maps that yields strong information about their rational preperiodic points. This is joint work with Irene Bouw, Ozlem Ejder, Neslihan Girgin, Valentijn Karemaker, and Michelle Manes. (Received September 24, 2017)