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Bella Tobin* (bella.tobin@okstate.edu), 401 Math Sciences, Oklahoma State University, Stillwater, OK 74075. *Applications of Dynamical Belyi Polynomials in Arithmetic Dynamics*. Preliminary report.

We will discuss application of dynamical Belyi polynomials in arithmetic dynamics. Dynamical Belyi maps are conservative polynomials defined over $\mathbb{Q}\mathbb{Q}$ with critical points at $0, 1$ and ∞ . The family of dynamical Belyi polynomials are a building block for the family of bicritical polynomials and they prove useful in determining necessary and sufficient conditions for when post-critically finite polynomials can have potential good reduction at a given prime. (Received September 14, 2020)