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David Krumm* (dkrumm@reed.edu), Portland, OR, **Diego Marques**, Brasília, DF , Brazil, and **Carlos Gustavo Moreira**, Rio de Janeiro, RJ , Brazil. *Algebraic preperiodic points of entire transcendental functions*. Preliminary report.

Motivated by questions in transcendental number theory, K. Mahler asked in 1976 whether there exists an entire transcendental function $f : \mathbb{C} \rightarrow \mathbb{C}$ with the property that $f(\overline{\mathbb{Q}}) \subseteq \overline{\mathbb{Q}}$ and $f^{-1}(\overline{\mathbb{Q}}) \subseteq \overline{\mathbb{Q}}$. Mahler's question was answered in the affirmative by Marques and Moreira in 2016. In this talk we will discuss some dynamical properties of this type of function f , in particular the structure of the directed graph of algebraic preperiodic points of f . (Received September 17, 2019)