

1147-11-467

**Trevor Hyde\***, 609 Lawrence St., 4B, Ann Arbor, MI 48104. *Cyclotomic factors of necklace polynomials.*

Necklace polynomials arise naturally in combinatorics, number theory, dynamics, and representation theory. It was recently observed that necklace polynomials vanish at many roots of unity. I will demonstrate this phenomenon through examples and discuss how it leads to surprising connections with geometry, arithmetic, and group theory. (Received January 24, 2019)