

1135-11-289

Stephan Ramon Garcia* (stephan.garcia@pomona.edu), 610 N College Ave, Claremont, CA 91711. *Primitive root biases for prime pairs.*

We highlight remarkable biases displayed by prime pairs that were discovered by Pomona undergraduates in 2017. We study the difference between the number of primitive roots modulo p and modulo $p+k$ for prime pairs $p, p+k$. Assuming the Bateman–Horn conjecture, we prove the existence of strong sign biases for such pairs and we prove that for a small positive proportion of prime pairs $p, p+k$, the dominant inequality is reversed. (Received August 19, 2017)