

# Philadelphia Area Number Theory Seminar

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## Modular zeros in the character table of the symmetric group

**Abstract:** In 2017, Miller conjectured, based on computational evidence, that for any fixed prime  $p$  the density of entries in the character table of  $S_n$  that are divisible by  $p$  goes to 1 as  $n$  goes to infinity. I'll describe a proof of this conjecture, which is joint work with K. Soundararajan. I will also discuss the (still open) problem of determining the asymptotic density of zeros in the character table of  $S_n$ , where it is not even clear from computational data what one should expect.

**Thursday, September 9, 2021**  
3:25 { 4:45 PM

Bryn Mawr College  
Department of Mathematics  
Park Science Center **245**

Informal refreshments at 3:15PM in Park 361