Undergraduate Mathematics Seminar Department of Mathematics, Fall 2020



An elementary problem equivalent to the Riemann hypothesis

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Date: Tuesday, September 1

Time: 12:00 - 12:50 pm EDT

Location: Zoom, ID: 935 1032 7072

Cezar graduated with a PhD from Pitt under Piotr Hajlasz and William C. Troy with a thesis in number theory, analysis and special functions. Also, he was the Pitt Putnam coach between 2013-2017. Currently, he is a postdoctoral fellow at Texas Tech University working on some problems regarding the special values of L-functions (Riemann and multiple zeta). Moreover, he has been the TTU coach for the Putnam competition since 2018.



In this talk, I will speak about my absolute favorite paper from the American Mathematical Monthly which is about an elementary problem equivalent to the infamous Riemann hypothesis which concerns the complex (nontrivial) zeros of the Riemann zeta function.

This elementary problem of Lagarias concerns the sum of divisors function and the harmonic number. If time allows, I will talk about Robin's inequality and superabundant numbers.

SPEAKER(S) FOR NEXT WEEK:

Howie Hua



Organized by: Derek Orr, Tom Everest, Jeremiah Morgan, and Jeff Wheeler