

Friday, September 7, 2018, 4:10 pm

COLLOQUIUM TALK

Speaker: Bogdan Petrenko (EIU)

Old Main 2231

## Some Conjectural Properties of Coefficients of Cyclotomic Polynomials

### Abstract:

The goal of this talk is to interest the audience in some puzzling experimental observations about the asymptotic behavior of coefficients of cyclotomic polynomials. It is well known that any integer is a coefficient of some cyclotomic polynomial. We find it intriguing that when various families of coefficients of cyclotomic polynomials are plotted on the computer screen, the resulting pictures appear “asymptotically almost symmetric”. At present, we do not have any theoretical explanation of this perceived behavior of the coefficients. This talk is based on my joint work in progress with Brett Haines (Wolfram Research), Marcin Mazur (Binghamton University), and William Tyler Reynolds (University of Iowa).

SNACKS IN FACULTY LOUNGE AT 3:30 PM.  
EVERYONE WELCOME (EVEN IF YOU ARE UNABLE TO ATTEND  
THE TALK)

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