

Marcin Mazur (Binghamton University). “Representations of analytic functions as infinite products and some arithmetic applications.”

Abstract: I will discuss certain infinite product decomposition of functions analytic in a disc around 0. Then I will show some applications to arithmetic and to numerical computations of products of the form $\prod_p f(1/p)$, where the product is taken over all (sufficiently large) prime numbers and f is a function analytic in a neighborhood of 0 and such that $f(0) = 1$ and $f'(0) = 0$. This is a joint work with B. Petrenko.