Department of Mathematics

Postgraduate Number Theory Seminar

Distribution of signs and zeros of generalized Davenport-Heilbronn function

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Abstract: In the first part of the talk, we will discuss the distribution of signs of Karatsuba's Z-function. In the second part of the talk, we will count the number of zeros of generalized Davenport-Heilbronn function on the critical line. More explicitly, we will show that although the generalized Davenport-Heilbronn function does not satisfy Riemann hypothesis, still it has at least $cT(\log T)^{\delta}$ zeros in [T, 2T] on the critical line (an analogue of Selberg's result), where c and δ are constants.

Date: November 1, 2018 (Thursday)

Time: 3:30 – 4:30pm

Venue: Room 210, Run Run Shaw Bldg., HKU