THE UNIVERSITY   OF HONG KONG

Institute of Mathematical Research
Department of Mathematics

Geometry Seminar

Zeros of the derivative of the Riemann zeta functions

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Abstract

There is a deep connection between Siegel zeros and gaps of zeros of the Riemann zeta function. Montgomery pair correlation was conjectured based on this. Conrey and Iwaniec gave a theorem that a weak version of PCC implies that there are no Siegel zeros (not quite, but enough). However, we have difficulties to work out Conrey and Iwaniec's project. On the other hand, it is expected that the behavior of zeros of the derivative of the Riemann zeta function close to the cirical line may be helpful in knowing gaps of zeros of the Riemann zeta function. I will introduce some recent results for the derivative of the Riemann zeta function.

Date: January 29, 2010 (Friday)

Time: 3:00 – 4:00pm

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

All are welcome