

The Li coefficients for a class of L -functions and applications

Kamel MAZHOUDA

Faculty of sciences of Monastir, Tunisia

In this talk, we derive representations of the real part of the generalized Li coefficient equivalent to the generalized Riemann hypothesis for functions in a class of L -functions containing the Selberg class. Furthermore, we apply the Li criterion to prove that some L -functions violates the Riemann hypothesis. Finally, we show that we can use it to prove many interesting summations formulas. This is a joint work with Lejla Smajlović.

Reference : K. Mazhouda and L. Smajlovic, *On relations equivalent to the Generalized Riemann hypothesis for the Selberg class*, *Funct. Approx. Comment. Math.* 56 (1) (2017), 67–93.