
SUMIT GIRI, Centre de Recherches Mathématiques

On correlation of certain multiplicative functions

In this talk, we consider the correlation function of the form $\frac{1}{x} \sum_{n \leq x} F(n)G(n-h)$, where F and G are close to 1 on primes.

Also, replacing F by μ^2 , we compute an average of shifted Euler totient function $\phi(n-h)$ over square-free integers n and in general sums of the type $\sum_{n \leq x} \mu^2(n)G(n-h)$, where G is close to 1 on primes. This is joint work with R. Balasubramanian and Priyamvad Srivastav.