

**Abstract of paper [1].**

We further study an extension of Montgomery's pair-correlation conjecture and its relevance in some problems on the distribution of prime numbers, in particular, distribution in short intervals.

## **References**

- [1] A. Languasco, A. Perelli, and A. Zaccagnini. An extended pair-correlation conjecture and primes in short intervals. *Trans. Amer. Math. Soc.*, 369(6):4235–4250, 2017.