On primes, almost primes and the Möbius function in short intervals

Kaisa Matomäki University of Turku ksmato@utu.fi

In this talk I will introduce some fundamental concepts in analytic number theory such as primes, the Riemann zeta function and the Möbius function. I will discuss classical results concerning them and connecting them to each other.

Then I will move on to discussing the distribution of primes, almost primes and the Möbius function in short intervals. In particular I will describe some recent progress on the topic.