Speaker: Anna Maltsev (Queen Mary University of London)

**Title:** Covariance formulas for fluctuations of linear spectral statistics for Wigner matrices with few moments

**Abstract:** I will discuss our recent work on central limit theorems for the fluctuation of the linear spectral statistics for Wigner matrices with entries that have a finite variance but no finite 4th moment. This fluctuation tends to a Gaussian process and we obtain a closed form expression for its covariance. We also extract its integral kernel, and give it a heuristic interpretation. This is joint work with Asad Lodhia.