

## Meeting PRIN "String Theory as a bridge between Gauge Theories and Quantum Gravity"



Contribution ID: 3

Type: **not specified**

### **Tracy-Widom distribution in supersymmetric gauge theories**

*Thursday, February 23, 2023 2:30 PM (1 hour)*

It was recently recognized that various observables in four-dimensional supersymmetric gauge theories can be computed for an arbitrary 't Hooft coupling as determinants of certain semi-infinite matrices. I will show that these quantities can be expressed as Fredholm determinants of the so-called Bessel kernel and they are closely related to celebrated Tracy-Widom distribution (more precisely, its finite temperature generalization) describing level-spacing distributions in matrix model.

**Presenter:** KORCHEMSKY, Gregory P. (Saclay, IPhT)