ID de Contribution: **30** Type: **Non spécifié**

Arnaud Durand

vendredi 7 juin 2024 15:20 (30 minutes)

Capacities and (large) intersections for random sets in metric spaces, with applications in dynamical Diophantine approximation

We consider, in general metric spaces, the classes of random sets that are bound to intersect almost surely any deterministic set with positive capacity in a given gauge function. This property yields a lower bound on the size of the intersection of these random sets with arbitrary deterministic sets. It also implies Falconer's large intersection property. As an illustration, we study limsup sets based on random balls, and present a connection with Dvoretzky's covering problem and dynamical Diophantine approximation.