Scaling Limit of Uniform Spanning Tree in Three Dimensions

SPEAKER: Daisuke Shiraishi, Kyoto University
TIME: 1:45pm-2:45pm, Tuesday, October 8, 2019
VENUE: Room 310, Pudong Campus, 1555 Century Avenue
(上海纽约大学310教室, 上海市浦东新区世纪大道1555号)

ABSTRACT

We will show that the properly rescaled three-dimensional uniform spanning tree converges weakly with respect to a Gromov-Hausdorff-Prohorov-type topology in a space whose elements are measured, rooted real trees continuously embedded into Euclidean space. We will describe various properties of the intrinsic metrics, measures and embeddings of the limit in this space. This is based on a joint work with Omer Angel (UBC), David Croydon (Kyoto University) and Sarai Hernandez Torres (UBC).

BIOGRAPHY

Daisuke Shiraishi is a lecturer at Kyoto University, from which he received Ph.D. degree in Mathematics in 2012. His research interests focus on loop-erased random walk, uniform spanning tree and related topics.