KIRILL KASHKAN, University of Toronto
Dense Forests With Low Visibility

A set of points F in $\mathbb{R}^d$ is called a dense forest if there is a decreasing visibility function $V(\varepsilon)$ such that any line segment in $\mathbb{R}^d$ of length $V(\varepsilon)$ has a point of F within distance ε of it and F has finite density. Since being introduced in the 2010s, many forests with desirable properties have been constructed. Those properties being: low visibility, the forest being uniformly discrete, or having a deterministic construction.

This talk will present a dense forest constructed by modifying a set of points obtained from a Poisson Process. The dense forest has visibility $V(\varepsilon) \in O(\varepsilon^{-(d-1)} \log \varepsilon^{-1})$.