

東北大学大学院情報科学研究科  
純粋・応用数学研究センター

情報数理談話会のお知らせ

日 時： 2015 年 3 月 17 日 16:00 — 17:00

(会場にお茶を用意しております)

場 所： 東北大学大学院情報科学研究科棟 6 階小講義室

講演者： Olivier Pinaud 氏 (Colorado State University)

題 目： Random Schrödinger equations in the modeling of wave  
propagation in complex media

[概 要] In many practical situations, such as underwater acoustics or electromagnetic waves in turbulent atmosphere, the medium of propagation is only partially known and is a consequence often modeled as random. An important question is then to quantify how the randomness is propagated from the medium to the wavefield. This is in general a difficult problem, that admits partial solutions in the paraxial regime where the wavefield becomes a solution to a random Schrödinger equation. We will discuss in this talk various asymptotical regimes where the influence of the random medium can be precisely quantified. We will also discuss the effects of long-range correlations in the underlying medium and establish the well-posedness of some Schrödinger equations with fractional multiplicative noise.

ホームページ： <http://www.math.is.tohoku.ac.jp/research/colloquium.html>