

# **Correlation-based imaging**

**Josselin Garnier\***

\* Université Paris Diderot,

Laboratoire de Probabilités et Modèles Aléatoires & Laboratoire Jacques-Louis Lions  
( garnier@math.univ-paris-diderot.fr, <http://josselin-garnier.org/> )

## **ABSTRACT**

Sensor array imaging in a randomly scattering medium is usually limited because coherent signals recorded by the array and coming from a reflector to be imaged are weak and dominated by incoherent signals coming from multiple scattering by the medium. Stochastic and multi-scale analysis has recently allowed for the emergence of original imaging techniques. We will see in this talk how correlation-based imaging techniques can mitigate the multiple scattering of waves.