## 1145-60-884 **K Solna\*** (ksolna@math.uci.edu), UC Irvine, Irvine, CA 92617, and **J Garnier**, Paris. Beam Wave Scattering and Imaging in Clutter.

We will consider waves transmitted through and reflected from a complex medium in the case in which the medium has fine scale three-dimensional random fluctuations. We show how we can characterize statistically the beam wave in this case. Moreover, we show how we can use this characterization in the context of imaging and detection in very complex environments. (Received September 17, 2018)