1035-65-830 **hongkai zhao*** (zhao@math.uci.edu), Department of Mathematics, University of California, Irvine, CA 92697. *Time reversal and super-resolution in random medium.*

In this talk I will present mathematical and numerical study of super-resolution phenomenon for wave propagation in random medium. The super-resolution is due to multi-pathing and it is stable due to self-averaging. Our study is based on paraxial approximation and Wigner transformation. (Received September 16, 2007)