Encounter rates of Lagrangian particles in homogeneous isotropic turbulence SATOSHI YOKOJIMA, Department of Systems Engineering, Shizuoka University, Japan, TAKASHI MASHIKO, TAKAHIRO MATSUZAKA, TAKASHI MIYAHARA — Contact rates of Lagrangian particles are investigated numerically by direct simulation of homogeneous isotropic turbulence. The flow Reynolds number, the number of particles, and the contact radius are systematically changed, and the effects on the contact rates are discussed. In the talk, results based on a kinematic simulation of turbulence by unsteady random Fourier modes will be also presented.