

Seminarium Zakładu Zastosowań Matematyki

17.10.2018, godz. 10:15, s. 240

mgr Krzysztof Pilorz

Coalescing random jumps in continuum: evolution of states and mesoscopic scaling

Abstract

An individual-based model of possibly infinitely many jumping and merging particles will be discussed. States of the model are probability measures on configuration space of points in d -dimensional Euclidean space. The existence and uniqueness of the evolution of states will be discussed for the initial state being a sub-Poissonian measure. A Vlasov-type scaling will be presented, resulting in kinetic equation and therefore giving the mesoscopic description of the evolution.