Combinatoric approximation of the coalescence processes law.

Sebastian Baudelet*[1]

[1]Université Côte d'Azur – Université Côte d'Azur – France

Résumé

Coalescence or coagulation models study the dynamics of a closed system of particles only characterized by their masses, particles merge two by two at a rate given by a specific function of said masses called a kernel. We consider sytems with finite number of particles and aim to provide insights on its long time behavior more specifically the stages of the process where there is not a large number of particles remaining. To do so we restric ourselves to the case where all masses are integers and use combinatorial methods to approximate the Coalescence process law. Finally we establish approximation theorems using Wasserstein distance.

*Intervenant