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On the coming down from infinity of coalescing Brownian motions

Abstract:

Consider a system of Brownian particles on the real line where each pair of particles coalesces at a certain rate according to their intersection local time.

Assume that initially there are infinitely many particles in the system. We give conditions for the number of particles to come down from infinity.

We also identify the rate of the coming down from infinity for different initial configurations.

This is a joint work with C. Barnes and Z. Sun.