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Speeds of coming down from infinity for Λ -Fleming-Viot supports

Λ -Fleming-Viot process is a probability-measure valued process that is dual to a Λ -coalescent involving multiple collisions. It is well known that such processes can have the compact support property, i.e. its support becomes finite as soon as $t > 0$ even though the initial measure has an unbounded support.

For Λ -Fleming-Viot processes with Brownian spatial motion and with the associated Λ -coalescents coming down from infinity, applying the lookdown representation we obtain asymptotic results characterizing how fast the supports become finite near time 0. Our results are expressed using the asymptotics of tail distribution of the initial measure and speed function of coming down from infinity for the associated Λ -coalescent.

This talk is based on joint work with Zenghu Li and Huili Liu.