Dynamics of Lévy copula

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Let $(L_t)_{t\geq 0}$ be a multivariate Lévy process. Then, at least in principle, L_t at time t can be described in terms of the one-dimensional margins and the probabilistic copula, D_t say. However, in general it is difficult to specify the dynamical behaviour of $(D_t)_{t\geq 0}$. Furthermore, Lévy processes are often described using Lévy measures. To describe multivariate Lévy processes, Tankov (2003) introduced the concept of Lévy copulas. These describe the Lévy measure ν of an infinitely divisible distribution μ in terms of the margins of ν and the Lévy copula.

In this talk, we investigate the dynamical behaviour of Lévy copulas of Lévy processes and of other sequences of infinitely divisible distributions.