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Limit theorems for free Lvy processes

We consider different limit theorems for additive and multiplicative free Lévy processes. The main results are concerned with positive and unitary multiplicative free Lévy processes at small time, showing convergence to log free stable laws for many examples. The additive case is much easier, and we establish the convergence at small or large time to free stable laws. During the investigation we found out that a log free stable law with index 1 coincides with the Dykema-Haagerup distribution. We also consider limit theorems for positive multiplicative Boolean Lévy processes at small time, obtaining log Boolean stable laws in the limit.