

# Deriving subdiffusion equations

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It is widely used that super-diffusions can be derived from jump processes. Eventhough Caputo derivatives are widely used, the derivation of sub-diffusion equations is not very much studied mathematically.

After some motivations, we show the equations for sub-diffusions and derive them from an age structured equations with small jumps. The methodology allows us to obtain the same derivation from a wider class of waiting time processes.

This is a work with Min Tang (SJTU).