

## **[Talk 25] Diffusion with time-dependent diffusivity**

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I will make a review of the recent results on the theory of anomalous diffusion modelled with the time-dependent diffusivity. In the first part of the talk the recent advances in the theory of scaled Brownian motion are discussed, namely aging and time-averaged characteristics. Second part of the talk is devoted to the underdamped scaled Brownian motion. In particular, I discuss the absence of the overdamped limit for subdiffusive and ultraslow motions. Finally, in the third part I will talk about random diffusivity problem and suggest a "minimal" model for non-Gaussian yet normal diffusion.