

Fractional time equations and probabilistic representation

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In this talk, I will report some recent progress in the study of general fractional-time parabolic equations of mixture type, including existence and uniqueness of the solutions and their probabilistic representations in terms of the corresponding inverse subordinators with or without drifts. Fractional-time parabolic equations with source term will also be discussed and a new representation formula for the solution will be presented that does not involve fractional time derivative of the fundamental solution.