

Split-up algorithm in a population dynamics

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The considered problem is a hyperbolic nonlinear equation and its application to describe an evolution of structured population. Existence, uniqueness and continuity of solutions (with respect to time, initial data and model coefficients) in the space of nonnegative, finite Radon measures equipped with a flat metric was proved (in a linear case). Technically, main mathematical tool used in the analysis is a split-up algorithm and theory of dual equations.