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ANISOTROPIC PARABOLIC PROBLEMS WITH MEASURES DATA

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Abstract. In this work, we prove the existence of a weak solution of an anisotropic parabolic problem with measure data $u_t + Au + F(u,Du) = \mu$ and $u(0) = \mu_0$ with μ and μ_0 two Radon bounded measures. The operator A is a Leray-Lions operator with anisotropic growth conditions. Our approach is based on the anisotropic Sobolev inequality, a regularity result, a compactness result, and an integration by parts formula.

Mathematics subject classification (2010): 28C05, 35K10, 35K20, 35K55.
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