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**TWO-WEIGHTED INEQUALITY FOR PARABOLIC
SINGULAR INTEGRAL OPERATORS IN
VECTOR-VALUED LEBESGUE SPACES**

Abstract

In this paper, the author establishes the boundedness in weighted $L_{p,\omega}(\mathbb{R}^{n+1}; E)$ spaces on \mathbb{R}^{n+1} with parabolic singular integral operators. The conditions of these theorems are satisfied by many important operators in analysis. Sufficient conditions on weighted functions ω and ω_1 are given so that certain parabolic singular integral operator is bounded from the weighted Lebesgue spaces $L_{p,\omega}(\mathbb{R}^{n+1}; E)$ to $L_{p,\omega_1}(\mathbb{R}^{n+1}; E)$.