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ON DYADIC NONLOCAL SCHRÖDINGER EQUATIONS WITH BESOV INITIAL DATA

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ABSTRACT. In this paper we characterize a dyadic type Besov space as an adequate setting to solve the Schrödinger-Dirac type equation $i\frac{\partial u}{\partial t} = D^\beta u$ with $u(x,0) = u^0$ pointwise. Here D^β is the fractional derivative of order β associated to the dyadic distance δ on $(0,1)$.