Doubly nonlocal Fisher-KPP equation: Features and peculiarities

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Abstract. We overview properties of solutions to a reaction-diffusion equation, arising, in particular, in population ecology, where both reaction and diffusion parts are nonlocal. We describe a criterion for the comparison principle to hold. We consider sufficient and necessary conditions for the linear speed of propagation, and discuss two possible asymptotics of traveling waves with minimal speeds. We discuss also mechanisms and present rates for the accelerated propagation.