Moving agents for the contact process

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Continuing previous work on a class of dynamic environments for the contact process, we investigate extinction or survival of the infection when the agents perform an exclusion process on Z. This is an ongoing work in collaboration with M. Hilário, D. Ungaretti, and D. Valesin. In controlling the dependencies over the random environment a crucial role is plaid by the decoupling techniques of [R. Baldasso, A. Teixeira (2018). How can a clairvoyant particle escape the exclusion process? Ann. Inst. H. Poincaré Probab. Statist. 54:2177–2202.]. The general strategy is inspired by [M. Hilário, D. Ungaretti, D. Valesin, M. E. Vares (2022). Results on the contact process with dynamic edges or under renewals. Electron. J. Probab. 27.].