

Renormalisation of parabolic stochastic PDEs^{*}

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Abstract. We give a survey of recent result regarding scaling limits of systems from statistical mechanics, as well as the universality of the behaviour of such systems in so-called cross-over regimes. It transpires that some of these universal objects are described by singular stochastic PDEs. We then give a survey of the recently developed theory of regularity structures which allows to build these objects and to describe some of their properties. We place particular emphasis on the renormalisation procedure required to give meaning to these equations.

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