

## Stochastic Webinar



## Quasi-generalised KPZ equation

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Yvain Bruned has done his PhD under the direction of Lorenzo Zambotti at Université Pierre et Marie Curie (Paris VI) on Singular KPZ type equations. Then, he did post-doctoral positions at the University of Warwick and Imperial College London in the group of



Martin Hairer. He got his permanent academic position at the University of Edinburgh in January 2019.

Abstract: We will explain how derive the renormalised equation for the quasigeneralised KPZ equation with space-time white noise via the theory of Regularity Structures. This complements the program initiated by Gerencsér and Hairer for solving quasi-linear equations using regularity structures by an algebraic machinery that gives a systematic tool to remove non-local counterterms and provide a precise expression of the renormalised equation that is consistent with the semilinear case. The solution theory satisfies the chain rule and a natural notion of Itô isometry, which can be combined to obtain global in time solution.

This is a joint work with Mate Gerencser and Usama Nadeem.

**讲座时间:** 2024.3.12周二下午16:00-17:00 会议地点:ZOOM会议室 会议ID: 3541437366 密码: 123456

## 主办单位: 中科院数学与系统科学研究院应用数学所 北京理工大学数学与统计学院