



Stochastic Webinar



Some recent results on stochastic evolution equations: pseudo-differential noise and stability

唐昊 Oslo University

唐昊，2018年博士毕业于香港城市大学之后，受 Humboldt 基金资助在德国stuttgart大学做博士后，目前在挪威Oslo大学做博士后。研究兴趣为确定性/随机偏微分方程。



Abstract: in this talk, we will discuss three aspects of SPDEs:

(1) A Framework for Nonlinear Singular SPDEs: As the Gelfand-triple argument for local monotone SPDEs turns out to be inadequate in the singular cases, we propose a new framework based on proper regularization. Some recent results in the literature are extended in a cohesive and unified manner.

(2) Pseudo-differential Noise: To study/model intricate non-local random interactions, we extend the transport type noise by replacing the classical gradient operator with pseudo-differential operators. We establish two new cancellation properties, which play key roles in proving existence/uniqueness of solutions.

(3) Stability of Exiting Time: For certain stochastic fluid models, we demonstrate that (small) multiplicative noise does not simultaneously enhance the stability of the exiting time and the continuity of initial-data-dependence.

讲座时间:

2023. 9. 27 周三 下午16:00-17:00

会议地点: ZOOM会议室 会议ID: 354 143 7366 密码: 123456

主办单位:

中科院数学与系统科学院应用数学所
北京理工大学数学与统计学院