Une dynamique de Glauber pour Liouville

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Résumé

In this talk, I will discuss and analyze an SPDE which arises naturally in the context of Liouville quantum gravity. This SPDE is built to preserve the so-called Liouville measure which has been constructed recently on the two-dimensional sphere S^2 and the torus T^2 in the work by David-Kupiainen-Rhodes-Vargas. In its simplified form, the SPDE can be written as follows
$$\partial_t X = \tfrac{1}{2}\Delta X + e^{\gamma X} + \sqrt{2\pi}\xi$$ It belongs to the broad class of singular stochastic PDEs (which includes KPZ, dynamica