



ID de Contribution: 76

Type: Non spécifié

## Schramm Loewner Evolution, Conformal Loop Ensemble and Gaussian Free Field

Gaussian free field is the starting point for many construction in quantum field theory. In this talk, we study the level lines of GFF. In the first part, we introduce SLE, CLE and GFF. In the second part, we discuss three questions: what are the level lines of GFF, why they are SLE(4), and what properties do they have. In the third part, we explain that the collection of level loops of GFF is CLE(4). We will explain that the exploration of GFF gives a time parameter to each loop in CLE(4). This time parameter can be viewed as the local time process for CLE(4) and it provides an conformal invariant metric between loops in CLE(4).

**Auteur principal:** WU, Hao (University of Geneva)

**Orateur:** WU, Hao (University of Geneva)