# **Special Issue**

# Analysis on Random Conformal Geometry

## Message from the Guest Editor

This Special Issue focuses on random structures in the context of complex analysis, inspired by interactions between mathematics and physics. The central example is perhaps the Schramm–Loewner evolution (SLE), introduced by Oded Schramm. The SLE arises as the scaling limit of interfaces in 2D lattice models at criticality (percolation, Ising model, loop-erased random walk, uniform spanning tree), and its elegant combination of probability and complex analysis has led to the rigorous proofs of many conjectures originating in physics. Other topics in this Issue include conformal loop ensemble (CLE), Gaussian free field (GFF), Liouville quantum gravity (LQG), conformal field theory (CFT), planar maps, Loewner energy, conformal weldings, and more.

#### **Guest Editor**

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## Deadline for manuscript submissions

closed (30 September 2024)



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mdpi.com/si/169936

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The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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