Conformal Invariance of Ising Model Interfaces

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We consider the interfaces that arise in the critical Ising model in various setups. We will discuss their scaling limits in terms of SLE processes and variants, and also the recent tools introduced to investigate these questions (crossing probabilities and martingale observables).

Based on joint works with Stéphane Benoist, Dmitry Chelkak, Hugo Duminil-Copin, Antti Kemppainen, Kalle Kytölä, Pierre Nolin and Stanislav Smirnov.