

SEMPARIS – Séminaires en région parisienne

<http://string.lpthe.jussieu.fr/semparis/>

Séminaire Darboux - physique théorique et mathématiques

Mercredi 14 Novembre 2018, 14 :00

LPTHE, bibliothèque du LPTHE, tour 13-14, 4eme étage

Domaines : hep-th

Titre : *S-embeddings of planar graphs carrying the Ising model*

Orateur : **Dmitry Chelkak (DMA, ENS)**

Résumé : *During the last decade, a number of results on conformal invariance of the critical planar Ising model were obtained, both for correlation functions and collections of interfaces. Nevertheless, in sharp contrast to random-walk based models, all these results remained limited to 'nice' lattices and interaction constants (namely, to the Z-invariant Ising model on isoradial graphs) until recently. The main purpose of this talk is to discuss a new way of embedding weighted planar graphs into the complex plane - s-embeddings - which plays the role of Tutte's barycentric embedding for the critical Ising model. The technique developed so far allows to prove the convergence of critical FK-Ising interfaces to SLE(16/3) on arbitrary periodic weighted graphs and has a clear potential for generalizations.*
