Laudatio

Oberwolfach Preis 2013 for Prof. Hugo Duminil-Copin

Hugo Duminil-Copin has already established himself as a major figure in the study of probabilistic models that are motivated or inspired by physics, by providing brilliant solutions to several notorious landmark problems:

One can for instance mention the following three striking results: Together with Stas Smirnov, he proved that the connective constant of the hexagonal lattice is equal to $\sqrt{2 + \sqrt{2}}$ (in other words, the number of self-avoiding paths of length N on this lattice that start at the origin grows like $(2 + \sqrt{2})^{N/2+o(N)}$ when N tends to infinity). Together with Vincent Beffara, he determined the critical value for the random cluster models and the Potts models on the square lattice. Together with Alan Hammond, he proved that the self-avoiding walk is sub-ballistic.

Hugo Duminil-Copin possesses a particularly broad vision of his research field and has also made important contributions on topics as diverse as Gibbs states for Potts models, bootstrap percolation or random walks in random environment.

For this impressive body of results achieved at such an early stage in his carreer, Hugo Duminil-Copin from the university of Geneva is being awarded the 2013 Oberwolfach prize by the Oberwolfach foundation.