

## **RATE OF CONVERGENCE FOR CARDY'S FORMULA**

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We show that crossing probabilities in 2D critical percolation converge at a polynomial rate in the mesh size to their limit given by the Cardy-Smirnov formula. We then use this to obtain that in the half plane the probability that the cluster at the origin has diameter  $R$  decays like  $R^{-1/3}$  with polylogarithmic corrections, improving the previously known estimate of  $R^{-1/3+o(1)}$ .

Joint work with Dana Mendelson, Scott Sheffield and Sam Watson.