

# CONFORMAL INVARIANCE OF ISORADIAL DIMERS

ZHONGYANG LI

An isoradial graph is a planar graph in which each face is inscribable into a circle of the same radius. We study perfect matchings on a bipartite isoradial graph, obtained from the union of an isoradial graph and its interior dual graph. Using the isoradial graph to approximate a simply-connected domain bounded by a simple closed curve, by letting the mesh size go to zero, we prove that in the scaling limit, the distribution of height is conformally invariant and converges to a Gaussian free field.