CRISTIAN FAVIO COLETTI

CMCC - UFABC

Titulo/Title

Absence of Percolation on Doubling Graphs

Resumo/Abstract:

We consider the discrete Boolean model of percolation on weighted graphs satisfying the doubling metric condition. We study sufficient conditions on the distribution of the radii of balls placed at the points of a discrete point process for the absence of percolation, provided that the retention parameter of the underlying point process is small enough. We exhibit some interesting graphs where the main result of this work holds. An interesting example is given by the discrete Heinsenberg group which can not be embedded in R^n for any n.