

# ON TRAVERSABLE LENGTH IN THE 2-DIMENSIONAL SUPERCRITICAL BOND PERCOLATION

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We study the probabilities of left-right crossing events on some rectangles in the 2-dimensional subcritical bond percolation, and show a certain uniform convergence property of these probabilities in every interval of edge-probability  $p$ . Using this fact and the self-duality, we show a limit theorem on traversable length inside semi-cylinder in the supercritical phase, which gives an extension of Grimmett's work in 1981.