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Percolation network, for sites at concentration \( p = 59.9 \) percent, occupied at random on a square grid of 3000 sites on a side, using periodic boundary conditions. Sites are connected if they are adjacent along a vertical or horizontal direction, not along the diagonals. The white colored sites represent the infinite network; the next larger cluster colored bright yellow is a finite cluster. The size of the largest "hole" is the percolation correlation length, \( \xi_p \). The network obeys fractal geometry for length scales \( r < \xi_p \) and Euclidean geometry otherwise. See page 814. [Figure is courtesy of R. F. Voss, IBM Thomas J. Watson Research Center, Yorktown Heights, New York]