1011-05-182 **P. Balister**, **B. Bollobas** and **A. Sarkar*** (asarkar@memphis.edu), Department of Mathematical Sciences, University of Memphis, Memphis, TN 38152, and **M. Walters**. *Random Geometric Graphs.*

Let P be a Poisson process of intensity one in a square of area n, and construct the random graph $G(n, k)$ by connecting each point of P to its k nearest neighbours. We discuss various features of these graphs, such as the thresholds for connectivity and s-connectivity. (Received August 25, 2005)