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*Erdős picture of “most things”.*

Paul Erdős pioneered the program of understanding mathematical objects by asking about properties of typical elements. Thus, to understand a group (such as  $GL(n)$ ) one may ask what a typical matrix looks like. This gave rise to probabilistic group theory. This applies to integers (pick two integers at random, what is the joint distribution of the GCD and the LCM), to graphs, in fact to anything. I will review the program, some of Erdős’s contributions and some new results which interpolate between average case and worst case. (Received April 27, 2004)