The limit shape of random SU(3) representations
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I will present a model for random representations of the matrix group SU(3), and derive formulas for their limit shapes. The derivation leads to natural number-theoretic questions about the so-called Witten zeta function of SU(3), which turns out to have extremely interesting properties that are worth studying independently. I will also discuss the possible extension of these results to the study of random representations of any simple Lie algebra or compact connected simple Lie group.