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Title: The Amazing Super-Maze

Abstract: The entropy of the three-charge NS5-F1-P black hole in Type IIA string theory comes from the breaking of N1 F1 strings into N1N5 little strings, which become independent momentum carriers. In M theory, the little strings correspond to strips of M2 brane that connect pairs of parallel M5 branes separated along the M-theory direction. We show that if one takes into account the backreaction of the M-theory little strings on the M5 branes one obtains a maze-like structure, to which one can add momentum waves. We also show that adding momentum waves to the little strings gives rise to a momentum-carrying brane configuration -- a super-maze -- which locally preserves 16 supercharges. We therefore expect the backreaction of the super-maze to give rise to a new class of horizonless black-hole microstate solutions, which preserve the rotational symmetry of the black-hole horizon and carry \sqrt{5/6} of its entropy.