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Unknotting number and minimal crossing diagrams.

For every knot whose unknotting number we know, there is a minimal crossing diagram for the knot so that changing one of the crossings results in a knot with lower unknotting number. It has long been hoped that this was true of every knot; this would, in principle, provide an algorithm to compute unknotting number. We report on the results of a computer search which establishes that this cannot hold in general, however; there is a knot for which no crossing change in any minimal diagram for the knot lowers unknotting number. (Received July 18, 2017)