Shattering random graphs

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The shattering number of a graph G of size n is the cardinality of the smallest set of vertices S such that after removal of S from G, all connected components are of size o(n). Variants of this parameter were studied for general and random graphs. In the talk we will present improved bounds, new extremal cases and a novel algorithm for efficiently finding a roughly optimal shattering set for some random graphs.

Based on joint works with Nicole Balashov, Reuven Cohen and Michael Krivelevich.