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## Linear algebra and bootstrap percolation

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In \$\HH\$-bootstrap percolation, a set \$A \subset V(\HH)\$ of initially 'infected' vertices spreads by infecting vertices which are the only uninfected vertex in an edge of the hypergraph \$\HH\$. A particular case of this is the \$H\$-bootstrap process, in which \$\HH\$ encodes copies of \$H\$ in a graph \$G\$. We find the minimum size of a set \$A\$ that leads to complete infection when \$G\$ and \$H\$ are powers of complete graphs and \$\HH\$ encodes induced copies of \$H\$ in \$G\$. The proof uses linear algebra, a technique that is new in bootstrap percolation, although standard in the study of weakly saturated graphs, which are equivalent to (edge) \$H\$-bootstrap percolation on a complete graph.

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