Talk Math 2 Me

Friday March 29, 2019
DERR 329
12:00pm- 1:00pm

Bootstrap Percolation

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Abstract

Bootstrap percolation is an iterative process on the vertices of a graph. Initially, a proper, non-empty set of vertices is infected, and all other vertices are healthy. At each iteration, every healthy vertex with a certain number of infected neighbors becomes infected, and all infected vertices remain so permanently. At the end of the process, if all vertices are infected, percolation occurs. In this case, the initial set of infected vertices percolates the graph. Necessary and sufficient conditions for a set of vertices to percolate a 3-regular graph are presented, for any integers $n \geq 3$, and the percolation process on certain 3-regular graphs is examined.

Upcoming Fridays will feature student presentations of projects and research. Look for flyers hanging around the department or check the math department webpage for all updates on Talk Math 2 Me!
To sign up to speak, contact Ellen Robinson at ebr21@txstate.edu.