Packing and Jamming Circles in the Plane

SPEAKER
Professor Bob Connelly

ABSTRACT
Put a bunch of circular disks in a container and squeeze the container until they jam. What does the packing look like? What can you say about the density of the packing? When the disks are the same size and the container is a flat torus, the answer is known. If the sizes are random as with granular materials, for existence, there will be a minimum number of contacts. If the graph of contacts is a triangulation, often the density of the packing is quite large. Evan Solomonides and Maria Yampolskaya will demonstrate a simulation of packings as the container contracts until they jam.

NOV 26 at 5:15pm
Malott 532 ★ Refreshments