Fermi shows finite case. We want to prove that every finite board terminates.

Claim 1: Every finite board will eventually “stabilize”

Claim 2: There are no cycles in finite boards.

proof: define potential function:

\sum\_squares (d(square, x\_0)^2 c(square))

This function always increases on an act, and so you never get a cycle.

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then perry talks about the boundry, so there are no cycles in the finite board.

The boundry around the chips always grows.