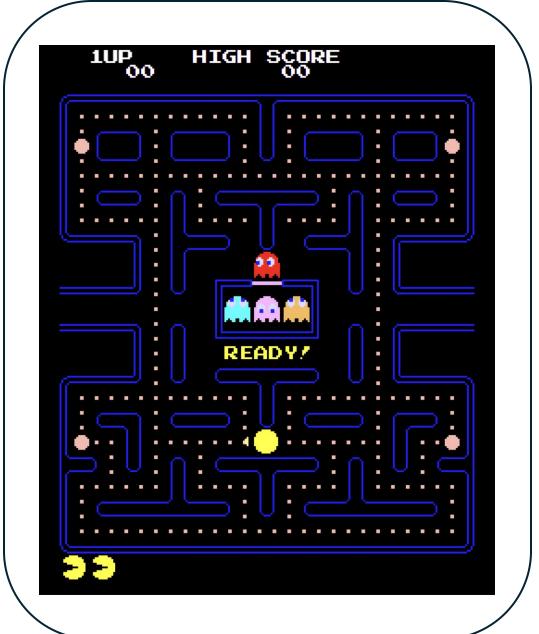


PHYSICS HACKATHON 2024

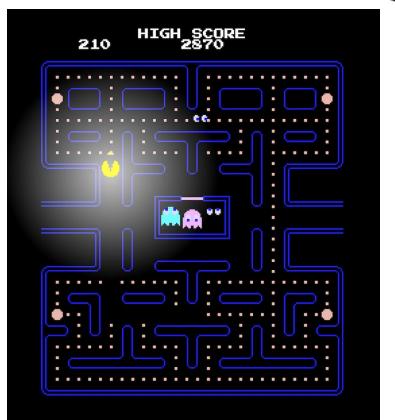
Remi Walhain, Cam Jeffery, Max Zhang



We're all familiar with the classic version of Pac-man...

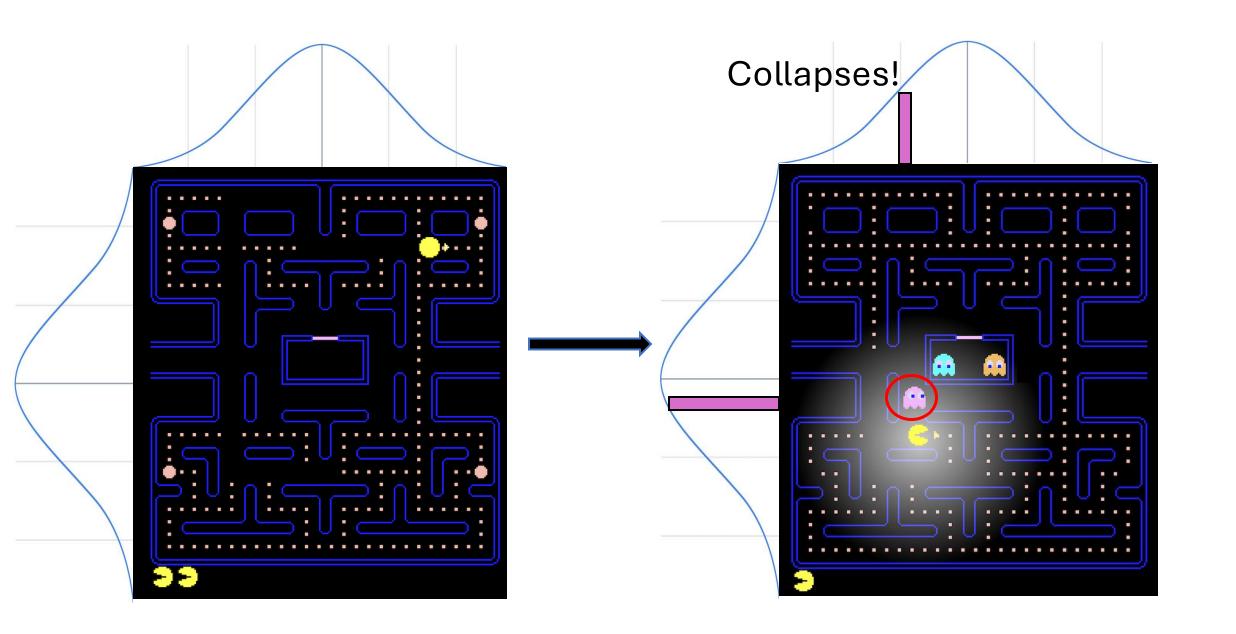
What if we gave it a quantum physics twist...

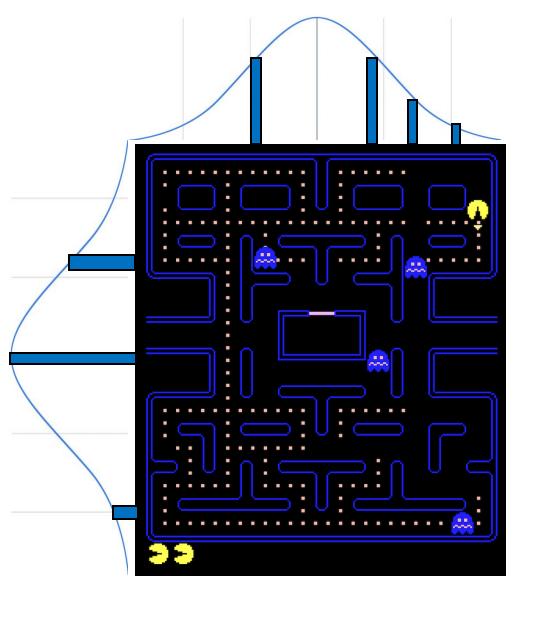




Where now each ghost acts as quantum particles whose position is given by a probability distribution.

$$\mathcal{P}_{x_0 \le x \le x_1} = \int_{x_0}^{x_1} \psi^*(x)\psi(x)dx = \int_{x_0}^{x_1} |\psi(x)|^2 dx$$





When Pac-man consumes a powerpellet, he lights up the entire screen, forcing each quantum ghost to collapse to a position.

Demo

e... Play Here

chetbae.github.io/quantum-pacman

