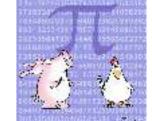
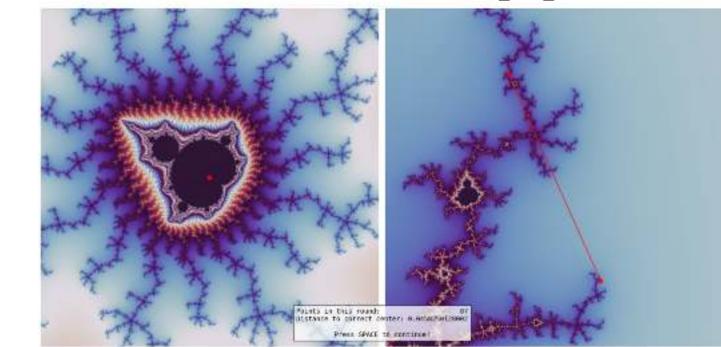
Michigan Math Club



Thursday at 4pm in EH1360 Pizza + pop outside afterwards!!



From GeoGuessr to the Mandelbrot set



Caroline Davis Indiana University



14 March 2024

How much information is contained in a little slice of the world? The existence of a GeoGuessr World Cup suggests: at least enough to determine where we are! For me, often my world is the Mandelbrot set. So what happens if we were to zoom into a little slice of the Mandelbrot set? Could we know where we are? Recently Vinicius Ambrosi programmed a game where you can try (<u>https://github.com/vambrosi/MandelGuessr</u>)! In this iteration of a math club talk, I'll walk you through why we can always win MandelGuessr (theoretically) then talk about what combinatorial information exists in the Mandelbrot set to have a fighting chance to win (practically).