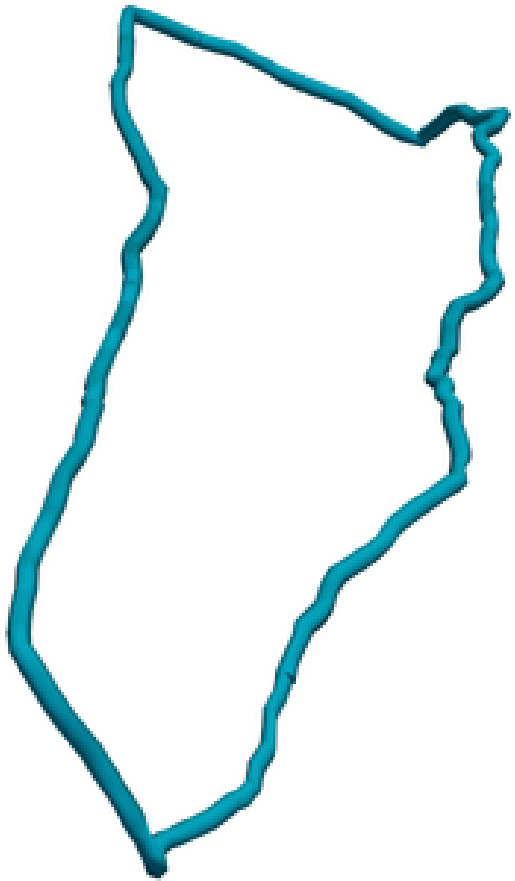
- Cosmic strings are long, thin, massive objects formed by spontaneous symmetry breaking
- They move due to tension in a curved string; thus produce gravitational waves (GWs) and self-interact. For strings, length=energy, and so as they emit GWs, they shrink
- Our interest is in the stochastic GW background (SGWB) of a population of loops of string
- Precise SGWB predictions require an understanding of evolution under self-interaction
- We generate loops by simulating a symmetry-breaking process, then evolve those loops numerically to model how the population changes

(Loops not to relative scale; videos uploaded separately)



Collaborators: Ken D. Olum and Jose J. Blanco–Pillado

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