

1154-VP-2724 **Jay Cummings*** (jay.cummings@csus.edu), 6000 J Street, Shasta Hall 253, Sacramento, CA 95819. *Hunters and Rabbits on Graphs.*

An invisible, omniscient rabbit is hiding behind some bushes. At each time-step, a collection of hunters shoot at some of the bushes, and if the rabbit is behind a bush that they fire at, the rabbit is killed. Otherwise, the rabbit hops to a neighboring bush and they try again. In this talk we investigate how many hunters are needed to guarantee a kill in finite time. We will give the answer for blowups or paths, the infinite ray and path, and the box product of a path with a cycle. (Received September 17, 2019)