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Jessalyn Bolkema* (jessalyn.bolkema@huskers.unl.edu) and **Corbin Groothuis**. *Hunting Invisible Rabbits on the Hypercube.*

The pursuit game “Hunters and Rabbits” is a variation on “Cops and Robbers” featuring a single rabbit trapped on a graph. The rabbit is invisible to the group of hunters seeking it, so the hunters need a strategy guaranteed to capture the rabbit in finite time without any knowledge of the rabbit’s current or former position. The *hunter number* for a given graph is the least number of hunters necessary to achieve this goal. We determine the hunter number for the discrete hypercube, and along the way, we establish a winning strategy for any graph satisfying certain isoperimetric nesting properties, applicable to grids, hypercubes, and other similar objects. (Received September 26, 2017)