

1135-VO-2637 **Casey Mann** (cemann@uw.edu), School of STEM, 18115 Campus Way N.E., Box 358538, Bothell, WA 98011, and **Jadie Adams**, **Gabriel Lopez*** (gabriel.lopez.x15@gmail.com) and **Nhi Tran**. *Your Friendly Neighborhood Voderberg Tile*. Preliminary report.

In 1936, H. Voderberg demonstrated an example of a tile (the Voderberg tile) with the amazing property that two copies can enclose a single copy (or two copies) of the tile without gaps or overlapping. Further, this tile gives rise to periodic tilings of the plane as well as striking nonperiodic spiral tilings. In this talk, we will discuss a generalization of the Voderberg tile having several amazing properties, a few of which answer long-standing open questions from Grünbaum and Shephards's *Tilings and Patterns*. (Received September 26, 2017)