1139-83-196 **David Garfinkle*** (garfinkl@oakland.edu), Dept of Physics, Oakland University, Rochester, MI 48309. *Gravitational wave memory.*

Gravitational waves are detected by their stretching and squeezing of space. Even after the wave has passed, there is a residual stretch and squeeze, which is called gravitational wave memory. This talk will cover several aspects of memory including memory in the expanding universe, an electromagnetic analog of memory, simple models and simple estimates of memory, and gauge invariant treatment of memory. (Received February 10, 2018)