1167-05-113 **Mark E. Watkins*** (mewatkin@syr.edu). *Infinite families of infinite vertex-transitive, non-Cayley graphs.* Preliminary report.

While all Cayley graphs are vertex-transitive, the converse is false. A number of papers (see, for example, B. McKay and C. Praeger) demonstrate the complexity of constructing families of finite vertex-transitive, non-Cayley graphs (VTNCGs). Infinite, locally finite, vertex-transitive graphs have 1, 2, or $2^{\aleph_0}$ ends (see R. Halin and H. A. Jung). In this quasi-expository talk, we present for each cardinality of ends a variety of infinite families of infinite VTNCGs. Indeed, the infinite problem appears to be more accessible than the finite problem. (Received February 28, 2021)