1139-18-276 **Peder Thompson*** (peder.thompson@ttu.edu), Lubbock, TX , and **Lars Winther Christensen** (lars.w.christensen@ttu.edu). *Pure-minimal chain complexes.*

The notion of minimality for chain complexes (of modules over a ring) is useful in the study of many homological invariants, including computing projective or injective dimension. A chain complex is *minimal* if every self homotopy equivalence is an isomorphism; this encompasses other standard ways of thinking about minimal complexes of projective or injective modules. However, minimal complexes of flat modules are not as well-behaved; for instance, minimal flat resolutions need not be unique nor detect flat dimension. To address this, we introduce the notion of a *pure-minimal* chain complex. We show that pure-minimality coincides with the usual notion of minimality in standard settings, while providing a more useful notion of minimality for complexes of flat modules. (Received February 13, 2018)