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Bennet Goeckner* (bennet@ku.edu). *Colorated homology and balanced complexes*. Preliminary report.

In this talk, we will introduce the idea of colorated homology, which gives rise to a particular decomposition of pure balanced simplicial complexes. This decomposition allows us to create balanced boolean trees and may lead to an extension of Duval and Zhang's result that states that all Cohen-Macaulay complexes can be decomposed into boolean trees. Time permitting, we will discuss how colorated homology relates to the color shifting of a complex. (Received July 16, 2017)