

1127-03-236

**Cameron Donnay Hill\*** (cdhill@wesleyan.edu), CT. *Decomposition, amalgamation, and something like logic programming.*

I will discuss an abstract notion of hierarchical decomposition of finite structures that is morally, if not directly, related to tree-decomposition, clique-decomposition, and similar. Working in the context of a whole amalgamation class of structures, one can add some uniformity conditions to this kind of decomposition that are suggestive of the “context-freeness” of clique-decomposition. I will point out some of the important points of proving that an amalgamation class that admits uniform hierarchical decomposition is rosy — i.e. that it carries a model-theoretic notion of geometry generalizing linear independence in vector spaces and algebraic independence in fields. (Received February 04, 2017)