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Jens Harlander* (jens.harlander@wku.edu), Department of Mathematics, Western Kentucky University, Bowling Green, KY 42101. *On the homotopy classification of 2-complexes*. Preliminary report.

For a given finitely presented group one can attempt to organize the set of presentations up to homotopy. By this I mean to classify the homotopy types of 2-complexes associated with presentations. For finite groups W.Browning (1980's) constructed an invariant that determines all homotopy types on the minimal Euler-characteristic level, provided the group satisfies a certain cancellation condition (and most finite groups do). He also showed that there is a unique homotopy type on every higher level. Isolated results are known for certain infinite groups such as free groups, Baumslag-Solitar groups and torus knot groups. In my talk I intend to survey the subject and present open problems. (Received January 22, 2007)