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Heejoung Kim* (hkim404@illinois.edu), 1409 West Green Street, UIUC Department of Mathematics, Urbana, IL 61801. *Generalizations of quasiconvexity in a word-hyperbolic group.*

In recent years, there have been lots of studies to generalize the theory of a word-hyperbolic group as it applies to an ambient finitely generated group. In particular, we have two notions for a subgroup of a finitely generated group, a stable subgroup and a Morse or strongly quasiconvex subgroup, which are two generalizations of a quasiconvex subgroup of a word-hyperbolic group. In this talk, we will discuss these two notions and understand them in non-positively curved groups and mapping class groups. In particular, the two notions are equivalent in the case of mapping class groups. (Received February 12, 2018)