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**Hung Cong Tran\*** ([hung.tran@uga.edu](mailto:hung.tran@uga.edu)), 1023 D. W. Brooks Drive, Athens, GA 30605. *On strongly quasiconvex subgroups*. Preliminary report.

We introduce the concept of strongly quasiconvex subgroups of an arbitrary finitely generated group. Strong quasiconvexity generalizes quasiconvexity in hyperbolic groups and is preserved under quasi-isometry. We prove that strongly quasiconvex subgroups have many properties analogous to those of quasiconvex subgroups of hyperbolic groups. We study strong quasiconvexity and stability in relatively hyperbolic groups, two dimensional right-angled Coxeter groups, and right-angled Artin groups. We note that the result on right-angled Artin groups strengthens the work of Koberda-Mangahas-Taylor on characterizing purely loxodromic subgroups of right-angled Artin groups. (Received February 12, 2018)