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Keith Penrod* (keith.penrod@gmail.com). *Big Homotopy Theory*.

Cannon and Conner developed the theory of “big fundamental groups.” This is meant to expand on the notion of fundamental group and is a powerful tool that can be used for distinguishing spaces that are not distinguishable using the fundamental group. Turner proved several classical results, such as covering theory and Seifert-VanKampen for big fundamental groups. The purpose of this paper is to expand on the the theory, to refine the definitions, and to give more examples. Also, in this paper, we define big higher homotopy groups analogous to the way classical higher homotopy groups are defined. (Received September 10, 2013)