1037-20-370 **Christopher H. Cashen*** (`cashen@math.utah.edu`), University of Utah, Department of Mathematics, 155 S 1400 E RM 233, Salt Lake City, UT 84112-0090. *Quasi-isometries Between Tubular Groups.*

We give a method of constructing maps between tubular groups inductively according to a finite set of strategies. This map will be a quasi-isometry exactly when the set of strategies satisfies certain consistency criteria. Conversely, if there exists a quasi-isometry between tubular groups, then there is a consistent set of strategies for building a quasi-isometry between them.

For two given tubular groups there are only finitely many candidate sets of strategies to consider, so it is possible in finite time to either produce a consistent set of strategies or decide that such a set does not exist. Consequently, there is an algorithm which in finite time decides whether or not two tubular groups are quasi-isometric. (Received February 05, 2008)