

1151-19-121 **Virgil Chan***, Department of Mathematical Sciences, IUPUI, 402 North Blackford, LD 270,
Indianapolis, IN 46202. *An Explicit Formula for the Loday Assembly*. Preliminary report.

We give an explicit description of the Loday assembly map on homotopy groups when restricted to a certain subgroup coming from the Atiyah-Hirzebruch Spectral Sequence. This proves and generalises a formula about the Loday assembly map on the first homotopy group written down in the survey article by Lück and Reich. Furthermore, we use this new result to prove the Loday assembly for the integral group ring of cyclic group of order 2 is a bijection on the second homotopy group, and is an injection when one considers n -fold direct sum of cyclic group of order 2. (Received August 13, 2019)