

Turkish Journal of Mathematics

Turkish Journal

of

Mathematics

An Example of an Indecomposable Module Without Non-Zero Hollow Factor Modules

Christian LOMP

Departamento de Matemática Pura

Universidade do Porto-PORTUGAL

e-mail: clomp@fc.up.pt

 [Keywords](#)
 [Authors](#)

Abstract: A module M is called hollow-lifting if every submodule N of M such that M/N is hollow contains a direct summand $D \subseteq N$ such that N/D is a small submodule of M/D . A module M is called lifting if such a direct summand D exists for every submodule N . We construct an indecomposable module M without non-zero hollow factor modules, showing that there are hollow-lifting modules which are not lifting. The existences of such modules had been left open in a recent work by N. Orhan, D. Keskin-Tütüncü and R. Tribak [2].

Key Words: Hollow modules, Indecomposable modules, Lifting modules, coalgebras



math@tubitak.gov.tr

Turk. J. Math., **31**, (2007), 415-419.

Full text: [pdf](#)

[Scientific Journals Home Page](#)

Other articles published in the same issue: [Turk. J. Math., vol.31, iss.4.](#)