

ON THE VANISHING OF EXT AND \varprojlim^1

S. BAZZONI

We consider the relations between the vanishing of Ext functors and the derived functors of the inverse limit.

In particular, we focus on the Mittag-Leffler condition on countable inverse limits and we illustrate how this condition can be used to solve a problem on tilting classes of modules and on the class of Baer modules.

Moreover, we discuss how to relate the vanishing of \varprojlim^n with an open problem on Σ -cotorsion modules, namely the problem of determining if pure submodules of Σ -cotorsion modules are cotorsion.

DIPARTIMENTO DI MATEMATICA PURA E APPLICATA, UNIVERSITÀ DI PADOVA,
VIA BELZONI 7, 35131 PADOVA

E-mail address: `bazzoni@math.unipd.it`