THE FIELDS INSTITUTE

FOR RESEARCH IN MATHEMATICAL SCIENCES

ABSTRACTS 1.2

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Short exact sequences with indecomposable cokernel term (25-30)

Let

$$0 \to A \xrightarrow{i} B \xrightarrow{p} C \to 0$$

be a short exact sequence with C indecomposable. We show that

$$\underline{\operatorname{Hom}}(\tau^{-}A,C)/\operatorname{Im}(\tau^{-}A,p)$$

has simple socle as an $\operatorname{\underline{End}} C$ -module. We shall explain how this result emerged from attempting to find an alternative proof of a result of Krause's on kernels of irreducible maps.