SERRE SPECTRAL SEQUENCE-II

XINGZHI HUANG

1. Construction of Serre Spectral Sequence-Proof

As we've shown, the first page of the Serre spectral sequence is given by

$$E_{p,q}^1 \cong H_{p+q}(p^{-1}(B^p), p^{-1}(B^{p-1}); R).$$

where the differential d^1 is the $j \circ k$, which are induced from the long exact sequence of the triple

$$(p^{-1}(B^p), p^{-1}(B^{p-1}), p^{-1}(B^{p-2})).$$

References

1. Wenwei Li. *Methods of Algebra, Vol. 2: Linear Algebra*. Higher Education Press, 2024. (in Chinese)
2. McCleary, John. *A User's Guide to Spectral Sequences*, 2nd ed. Cambridge University Press, 2001.