

Table of Contents

Table of Contents	v
Acknowledgements	vi
Abstract	vii
Introduction	1
1 Preliminary	7
1.1 Local cohomology modules	8
1.2 Spectral sequences	17
2 Extension functors of local cohomology modules	24
2.1 Bass numbers of local cohomology modules	27
2.2 Cofinite modules	34
2.3 Applications	42
3 Torsion functors of local cohomology modules	47
3.1 Betti numbers of local cohomology modules	49
3.2 More applications	56
4 Section functors of local cohomology modules	62
4.1 Arithmetic of cohomological dimensions	64
4.2 Artinian local cohomology modules	69
4.3 Non-Artinian local cohomology modules	73
Bibliography	79