

Contents

9 Symplectic cohomology of cotangent bundles	279
1 Introduction	279
2 Basic notions	280
3 A first look at Floer cohomology	284
4 Towards gradings and orientations	290
5 Floer cohomology of linear Hamiltonians	304
6 Symplectic cohomology as a limit	309
7 Aside on orientation lines	318
8 Guide to the literature	319
10 Operations in symplectic cohomology	323
1 Introduction	323
2 The BV operator	326
3 The pair of pants product	331
4 The unit	344
5 The BV equation	347
6 Guide to the literature	352
11 String topology using piecewise geodesics	355
1 Introduction	355
2 Construction	356
3 Morse theory	359
4 Operations on loop homology	366
5 Guide to the literature	375
12 From symplectic cohomology to loop homology	377
1 Introduction	377
2 The Maslov index for loops	377
3 Construction of a chain map	384
4 Compatibility with operations	394
5 Manifold structure on moduli spaces	400
6 Guide to the literature	403

13 Viterbo's theorem: surjectivity	405
1 Introduction	405
2 Chords, Maslov index, and action	406
3 From Morse homology to Floer cohomology	422
4 From loop homology to symplectic cohomology	429
5 Composition on loop homology	435
6 Guide to the Literature	452
14 Viterbo's theorem: isomorphism	455
1 Introduction	455
2 From Floer cohomology to Morse homology via families of Lagrangians	456
3 Composition on Floer cohomology	462
Bibliography to Part II	481