

Contents

Preface to the English Edition	v
Preface	vii
1 Introduction	1
2 Cutoff and Other Special Smooth Functions on \mathbb{R}^n	13
3 Algebras and Points	21
4 Smooth Manifolds (Algebraic Definition)	37
5 Charts and Atlases	53
6 Smooth Maps	65
7 Equivalence of Coordinate and Algebraic Definitions	77
8 Spectra and Ghosts	85
9 The Differential Calculus as a Part of Commutative Algebra	95
10 Smooth Bundles	143
11 Vector Bundles and Projective Modules	161

Afterword	207
Appendix	
<i>A. M. Vinogradov</i> Observability Principle, Set Theory and the “Foundations of Mathematics”	209
References	217
Index	219



<http://www.springer.com/978-0-387-95543-8>

Smooth Manifolds and Observables

Nestruev, J.

2003, XIV, 222 p., Hardcover

ISBN: 978-0-387-95543-8