

Herbert Alexander  
John Wermer

# Several Complex Variables and Banach Algebras

Third Edition



Springer

# Table of Contents

<b>Preface to the Second Edition</b>	<b>ix</b>
<b>Preface to the Third Edition</b>	<b>xi</b>
<b>Chapter 1 Preliminaries and Notation</b>	<b>1</b>
<b>Chapter 2 Classical Approximation Theorems</b>	<b>5</b>
<b>Chapter 3 Operational Calculus in One Variable</b>	<b>17</b>
<b>Chapter 4 Differential Forms</b>	<b>23</b>
<b>Chapter 5 The <math>\bar{\partial}</math>-Operator</b>	<b>27</b>
<b>Chapter 6 The Equation <math>\bar{\partial}u = f</math></b>	<b>31</b>
<b>Chapter 7 The Oka-Weil Theorem</b>	<b>36</b>
<b>Chapter 8 Operational Calculus in Several Variables</b>	<b>43</b>
<b>Chapter 9 The Šilov Boundary</b>	<b>50</b>
<b>Chapter 10 Maximality and Radó's Theorem</b>	<b>57</b>
<b>Chapter 11 Maximum Modulus Algebras</b>	<b>64</b>
<b>Chapter 12 Hulls of Curves and Arcs</b>	<b>84</b>
<b>Chapter 13 Integral Kernels</b>	<b>92</b>
<b>Chapter 14 Perturbations of the Stone-Weierstrass Theorem</b>	<b>102</b>
<b>Chapter 15 The First Cohomology Group of a Maximal Ideal Space</b>	<b>112</b>
<b>Chapter 16 The <math>\bar{\partial}</math>-Operator in Smoothly Bounded Domains</b>	<b>120</b>

<b>Chapter 17</b>	<b>Manifolds Without Complex Tangents</b>	<b>134</b>
<b>Chapter 18</b>	<b>Submanifolds of High Dimension</b>	<b>146</b>
<b>Chapter 19</b>	<b>Boundaries of Analytic Varieties</b>	<b>155</b>
<b>Chapter 20</b>	<b>Polynomial Hulls of Sets Over the Circle</b>	<b>170</b>
<b>Chapter 21</b>	<b>Areas</b>	<b>180</b>
<b>Chapter 22</b>	<b>Topology of Hulls</b>	<b>187</b>
<b>Chapter 23</b>	<b>Pseudoconvex sets in <math>C^n</math></b>	<b>194</b>
<b>Chapter 24</b>	<b>Examples</b>	<b>206</b>
<b>Chapter 25</b>	<b>Historical Comments and Recent Developments</b>	<b>224</b>
<b>Chapter 26</b>	<b>Appendix</b>	<b>231</b>
<b>Chapter 27</b>	<b>Solutions to Some Exercises</b>	<b>237</b>
	<b>Bibliography</b>	<b>241</b>
	<b>Index</b>	<b>251</b>