

CONTENTS

F. ALI MEHMETI		
Reflection and refraction of singularities for wave equations with interface conditions given by Fourier integral operators		6
L.A. BAGIROV		
On the solutions for a class of elliptic equations degenerate at the boundary		20
M. COSTABEL, M. DAUGE		
Edge asymptotics on a skew cylinder		28
M. COSTABEL, F. PENZEL, R. SCHNEIDER		
A collocation method for a screen problem in \mathbb{R}^3		43
YU.V. EGOROV, V.A. KONDRAT'EV		
To the study of the negative spectrum of an elliptic operator		51
J. ELSCHNER		
On the double layer potential operator over polyhedral domains: solvability in weighted Sobolev spaces and spline approximation		57
A. M. IL'IN		
The bisingular problems		65
L. JENTSCH		
On a bimetal problem for heat conductions		69
V.A. KOZLOV		
Spectral properties of operator pencils, associated with elliptic boundary value prob- lems in a cone		79
D. LEGUILLON, E. SANCHEZ-PALENCIA		
Crack phenomena in heterogeneous media		85
M. LORENZ, B.-W. SCHULZE		
Propagation of branching conormal asymptotics for hyperbolic Cauchy problems . .		104
M. LORENZ, Y.A. SMAIEL		
Reflection of branching asymptotics for hyperbolic problems		118
R. MAZZEO		
Edge operators in geometry		127
G.A. MENDOZA, F. TREVES		
On solvability of systems of vector fields		138
S.A. NAZAROV, B.A. PLAMENEVSKIĬ		
On the Neumann problem in domains with edges		144
V.S. RABINOVICH		
Spectral and scattering theory for acoustic operators in non-homogeneous fluids. Continuous and discrete models		158
J.A.A. ROJBERG		
The Cauchy problem, boundary value and mixed problems for hyperbolic systems in the complete scale of Sobolev type spaces		168

J.A.A. ROÝTBERG, Z.G. SHEFTEL	
On the density of the solutions of elliptic boundary value problems in the sense of Petrovsky systems in functional spaces on manifolds	176
A.-M. SÄNDIG, R. SÄNDIG	
Singularities of non-rotationally symmetric solutions of boundary value problems for the Lamé equations in a 3 dimensional domain with conical points	181
H. SCHMITZ	
A collocation method for potential problems with a mixed Dirichlet-Signorini bound- ary condition	194
B. SCHMUTZLER	
The structure of branching asymptotics for elliptic boundary value problems in do- mains with edges	201
B.-W. SCHULZE	
The Mellin pseudo-differential calculus on manifolds with corners	208
M.A. SHUBIN	
A Lefschetz fixed point formula in reduced L^2 -cohomologies on manifolds with cylinders	290
L.R. VOLEVICH	
A mixed problem for evolution equations	298