

Contents

Preface	xi
Introduction	
PETER KUCHMENT AND EVGENY SEMENOV	1
My father Selim Krein	
TATIANA VORONINA (NEE KREIN)	17
Kyiv, Fall of 1943 through 1946. The rebirth of mathematics	
YU. M. BEREZANSKY	23
Selim Grigorievich Krein in Stony Brook	
DAVID G. EBIN	29
On algebraically integrable bodies	
MARK AGRANOVSKY	33
Rearrangement invariant spaces satisfying Dunford-Pettis criterion of weak compactness	
SERGEY V. ASTASHKIN	45
A new method of extension of local maps of Banach spaces. Applications and examples	
GENRICH BELITSKII AND VICTORIA RAYSKIN	61
Two consequences of the associativity condition for a hypercomplex system with locally compact basis	
YU. M. BEREZANSKY AND A. A. KALYUZHNYI	73
Inversion formulas of integral geometry in real hyperbolic space	
WILLIAM O. BRAY AND BORIS RUBIN	81
Total positivity, Grassmannian and modified Bessel functions	
V. M. BUCHSTABER AND A. A. GLUTSYUK	97
A remark on the intersection of plane curves	
C. CILIBERTO, F. FLAMINI, AND M. ZAIDENBERG	109
Topological billiards, conservation laws and classification of trajectories	
A. T. FOMENKO AND V. V. VEDYUSHKINA	129
Hasse–Schmidt Derivations and Cayley–Hamilton theorem for exterior algebras	
LETTERIO GATTO AND INNA SCHERBAK	149

Complex analysis on the real sphere, or variations on a Maxwell's theme SIMON GINDIKIN	167
The weighted Laplace transform GISELE RUIZ GOLDSTEIN, JEROME A. GOLDSTEIN, GIORGIO METAFUNE, AND LUIGI NEGRO	175
Surfaces with big automorphism groups SHULIM KALIMAN	185
Some binomial formulas for non-commuting operators PETER KUCHMENT AND SERGEY LVIN	197
Similarity of holomorphic matrices on 1-dimensional Stein spaces JÜRGEN LEITERER	209
Weighted geometric means of convex bodies VITALI MILMAN AND LIRAN ROTEM	233
Sobolev, Besov and Paley-Wiener vectors in Banach and Hilbert spaces ISAAC Z. PESENSON	251
Toeplitz operators in polyanalytic Bergman type spaces GRIGORI ROZENBLUM AND NIKOLAI VASILEVSKI	273
Complete metric space of Riemann integrable functions and differential calculus in it SERGUEI SAMBORSKI	291