

## Contents

<b>PREFACE</b> .....	v
<b>POETRY</b>	
Valeri Petrov (1920–2014): ‘A CRY FROM CHILDHOOD’ and ‘FLYING PEOPLE’ read by Anton Antonov .....	ix
<b>LIST OF PARTICIPANTS</b> .....	xi
<b>CONTRIBUTED PAPERS</b>	1
<i>D.N. Poenaru, R.A. Gherghescu, W. Greiner:</i> Charged Anti-Cluster Decay Modes of Antimatter Nuclei.....	3
<i>M.A. Zhusupov, E.T. Ibraeva, R.S. Kabatayeva:</i> Inelastic Scattering of Protons on $^9\text{Be}$ Nucleus ( $J^\pi = 3/2^+, 5/2^-$ ) in the Glauber Theory .....	12
<i>R.A. Gherghescu, D.N. Poenaru:</i> Influence of Cranking Inertia on Binary Nuclear Processes.....	25
<i>C. Giusti, A. Meucci, M.V. Ivanov, J. M. Udías:</i> Relativistic Green’s Function Model and Optical Potential .....	34
<i>A.N. Antonov, M.V. Ivanov, M.B. Barbaro, J.A. Caballero, G.D. Megias, R. González-Jiménez, C. Giusti, A. Meucci, E. Moya de Guerra, J.M. Udías:</i> Charge-Current and Neutral-Current Quasielastic Neutrino(Antineutrino) Scattering on $^{12}\text{C}$ with Realistic Spectral and Scaling Functions .....	45
<i>M.V. Ivanov, A.N. Antonov, M.B. Barbaro, J.A. Caballero, G.D. Megias, R. González-Jiménez, E. Moya de Guerra, J.M. Udías:</i> Charged-Current Inclusive Neutrino Cross Sections: Superscaling Extension to the Pion Production and Realistic Spectral Function for Quasielastic Region.....	55
<i>M.K. Gaidarov, A.N. Antonov, D.N. Kadrev, P. Sarriguren, E. Moya de Guerra:</i> Temperature Dependence of the Symmetry Energy in Finite Nuclei ....	62
<i>B.A. Prmantaeva, A. Ryskulov, G. Ryskulova, S.A. Nurkenov:</i> Production and Use of the Radiopharmaceuticals ( $^{18}\text{F}$ -FDG and $^{18}\text{F}$ -NaF) in Nuclear Medicine in Kazakhstan.....	72

## CONTENTS

<i>N. Chamel, A.F. Fantina, L.M. Mihailov, Zh.K. Stoyanov, Y.D. Mutafchieva, D. Peña Arteaga, R.L. Pavlov, Ch.J. Velchev:</i> Electron Captures and Neutron Emissions in Magnetic White Dwarfs and Magnetars .....	83
<i>I. Deloncle, F. Lechaftois, S.Péru:</i> Valence Space Techniques and QRPA Vibrational Mass Parameters ....	93
<i>N. Minkov and P.M. Walker:</i> Deformations and Magnetic Moments in High- <i>K</i> Isomeric States of Heavy and Superheavy Nuclei .....	104
<i>K.P. Drumev, A.I. Georgieva:</i> Pairing-Quadrupole Connections in the Algebraic Shell Model Applied to sd-Shell Nuclear Systems .....	115
<i>N. Chamel, A.F. Fantina, J.L. Zdunik, P. Haensel:</i> Deep Crustal Heating in Accreted Neutron Star Crusts Using the Brussels-Montreal HFB-27* Nuclear Mass Model .....	126
<b>AUTHOR INDEX</b> .....	133