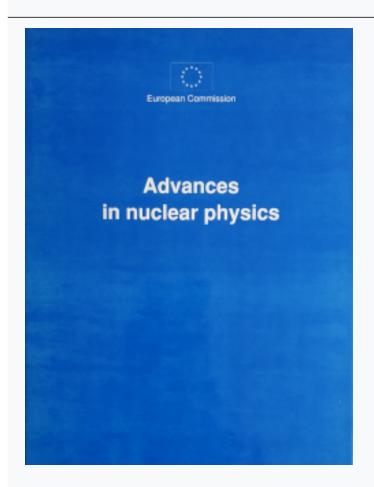




HNPS Advances in Nuclear Physics

Vol 5 (1994)

HNPS1994



Editorial Comments and Symposium Info

/ Editorial Comments

doi: 10.12681/hnps.2890

To cite this article:

Editorial Comments, /. (2020). Editorial Comments and Symposium Info. *HNPS Advances in Nuclear Physics*, *5*, i-vii. https://doi.org/10.12681/hnps.2890

ORGANIZING COMMITTEE

ANAGNOSTATOS, G.S., NCSR "DEMOCRITOS", ATHENS ASSIMAKOPOULOS, P., UNIVERSITY OF IOANNINA GRYPEOS, M.E., ARISTOTLE UNIVERSITY, THESSALONIKI KALFAS, C.A., NCSR "DEMOCRITOS" PAPANICOLAS, C., UNIVERSITY OF ATHENS

LOCAL ORGANIZING COMMITTEE

CHATZICONSTANTINOU, P., UNIVERSITY OF PATRAS

KAPLANIS, S., TECHNOLOGICAL EDUCATIONAL INSTITUTE OF PATRAS

KECHRINIOTIS, A., UNIVERSITY OF PATRAS

RONCHI, C., EUROPEAN COMMISSION, ITU KARLSRUHE (D)

SYROS, C., UNIVERSITY OF PATRAS (CHAIRMAN)

VELGAKIS, M., UNIVERSITY OF PATRAS

PREFACE

This book includes the main papers presented at the 5th Panhellenic Symposium on Nuclear Physics, held in the University of Patras from 6 to 7 May 1994.

The presented papers belong to five topics: Quantum, Algebra, Nuclear Physics, including Clusters, Nuclear Materials and Thermonuclear Fusion.

The Local Organizing Committee wishes to thank the Rector of the University of Patras, Prof. Likourgiotis and the Chairman of the Engineering Science Department, Prof. V.V. Markellos for the financial support and for the disposal of the facilities of his Department. Financial support to the participating Post-graduate Students has been provided by the Hellenic Nuclear Physics Society. Organizational support has been offered to the Local Organizing Committee by the Post-graduate Students A. Kechriniotis and A Vagenas as well as by Mr. A. Magoulas from the Physics Section.

It is a pleasure for the Organizers to present this book which is published by the European Commission in the collection "Nuclear Science and Technology", and continues the Proceedings series of the Hellenic Nuclear Physics Society.

The editors

Constantinos Syros

Claudio Ronchi

Laboratory of Nuclear Technology University of Patras GR 26110 Patras, Greece Phone: (30) 61 997 765 Fax: (30) 61 997 653

273 882

Joint Research Centre Institute for Transuranium Elements D 76125 Karlsruhe, Germany Phone: (49) 7247 951 402 Fax: (49) 7247 951 593

CONTENTS:

Organizing Committees	
Preface	i
Quantum algebraic description of pairing correlations in a single J-nuclear shell.	
Bonatsos Daskaloyannis, C., Fässler, A.	1
Non-linear extension of the u(3) algebra as the symmetry algebra of the three-dimensional anisotropic quantum harmonic oscillator with rational ratios of frequencies and the Nilson model.	
Bonatsos, D., <u>Daskaloyannis, C</u> ., Kolokotronis, P., Lenis, D	14
Inclusive neutrino-nucleus reaction cross-section at intermediate energies. Kosmas, T.S., Oset, E.	29
Cluster approach to atomic nuclei: Alpha-chain states in ¹² C. <u>Anagnostatos, G.S.</u>	42
Particle number dependence of size and energy quantities in sodium clusters. Kotsos, B.A., Grypeos, M.E.	57
Shell model calculations in the A=90-98 mass region. A study of the N=51 nuclei. Divari, P., Skouras, L.	90
Application of the quantum mechanical hypervirial theorem to even-power series potentials. Liolios, T.E., Grypeos, M.E.	104
Relativistic expressions for the rms-radii of the Λ-particle orbits in hypernuclei and of the corresponding potential energies.	
Papadopoulos, D.J., Koutroulos, C.G., Grypeos, M.E.	125
Study of the generalized momentum distribution of model nuclear matter. Mavrommatis, E., Petraki, M., Clark, J.W.	139
The influence of state-dependent short range correlations on the depletion of nuclear Fermi sea.	
Lalazissis, G.A., <u>Massen, S.E.</u> , Panos, C.P.	158

The form factor and the density distribution of the "He nucleus using the Morse potential.	
Ypsilantis, K., Dimitrova, S., Koutroulos, C., Grypeos, M.E., Antonov, A	17
High-spin phenomena in ¹⁹⁴ Hg. <u>Fotiades, Ha</u> rissopulos, S., Kalfas, C.A., Kossionides, E., Papadopoulos, C.T., Vlastou, R., Serris, M., Sharpey-Schafer, J.F., Joyce, M.J., Beausang, C.W., Dagnall, P.J., Forsyth, P.D., Gale, S.J., Jones, P.M., Paul, E.S., Twin. P.J., Simpson, J.	180
Beryllium-7 concentration in the lower atmosphere at the region of Thessaloniki. Ioannidou A., Papastefanou, C.	185
Indoor radon measuremnts in Patras region using activated Carbon. Kaplanis, S.N., Bakalis, A.N.	196
Materials analysis by ion channeling at "DEMOCRITOS" Harissopulos, S., Kossionides, S., Paradellis, T., Maggiore, C	204
A study of the electrodynamic properties of macroscopically extended fermion matter. Kechriniotis, A., Syros, C.	223
The time concept in nuclear and sub-nuclear systems: the quantum and the macroscopic arrow of time. Syros, C.	242
Physics contributions from IPP Garching to the Fusion Program. Brakel, R.	288
Power deposition profile and superthermal energy spectra from modulated ECRH. Hartfuss, H.J., Erckmann, V., Kechriniotis, A., Massberg, H., Rome, M., and the W7-AS-Team.	294
Recent developments in high-temperature thermodinamic properties of nuclear reactor oxide fuel. Ronchi, C.	303