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Nota di contenuto	pt. I. Invited lectures. 1. Exotic nuclei. Research on neutron clusters / F. M. Marques. Neutron transfer studied with a radioactive beam of [symbol]Ne, using TIARA at SPIRAL / W. Catford et al. for the TIARA collaboration. Rare Isotopes INvestigations at GSI (RISING) using relativistic ion beams / J. Jolie et al. Mass formula from normal to hypernuclei / C. Samanta. 2. Exotic nuclear structures. Exotic phenomena in medium mass nuclei / A. Petrovici. NUSTAR at FAIR. Nuclear structure research at GSI and the future / G. Muenzenberg. From super-radiance to continuum shell model / V. Zelevinski. New methods for the exact solution of the nuclear eigenvalue problem beyond mean field approaches / F. Andreozzi, N. Lo Iudice and A. Porrino. Q-phonon approach for low-lying 1[symno] two-phonon states in spherical nuclei / R. V. Jolos, N. Yu. Shirikova and V. V.

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"This volume documents an important event in the World Year of Physics 2005 and a continuation of the traditional international summer schools that have taken place in Romania regularly since 1964. On one hand, the study of exotic nuclei seeks answers about the structure and interaction of unique finite quantum mechanical many-body systems. On the other, it provides data that have an impact on the understanding of the origin of the elements in the Universe. The contributions, written by outstanding professors from prestigious research centers over the world, provide the reader with both comprehensive reviews and the most recent results in the field. Large experimental facilities are discussed together with future research projects. The book offers insights into how experiments in terrestrial nuclear physics laboratories may be combined with observations in outer space to enlarge our basic knowledge."
