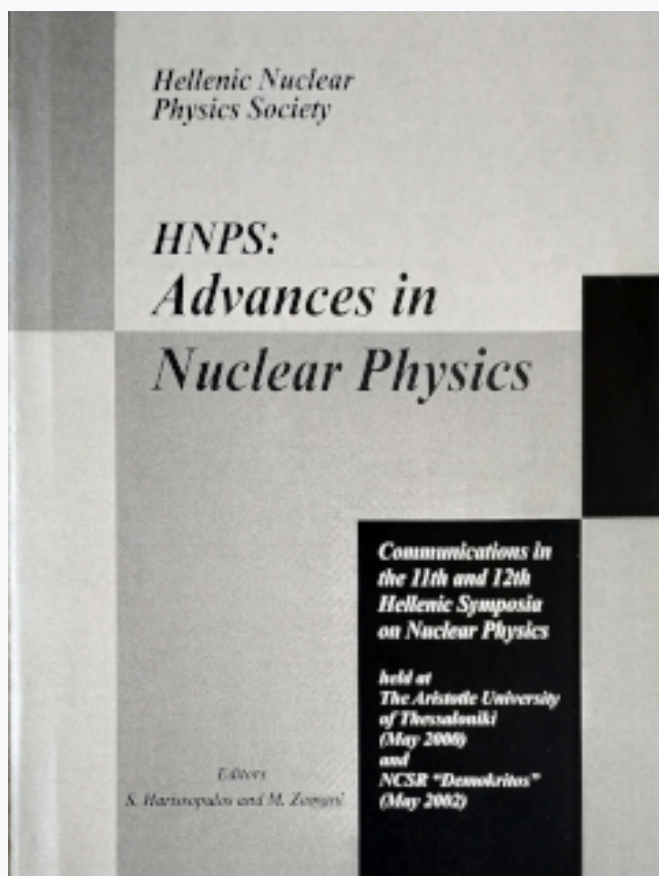


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INFORMATION ON THE SIZE AND OTHER QUANTITIES OF Λ -ORBITALS IN HYPERNUCLEI FROM EXPERIMENTAL Λ -ENERGIES

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Abstract: An approach is proposed on the basis of which the experimentally known two lower energy eigenvalues of a Λ -particle assumed to be bound in a hypernucleus by a central potential (from a fairly wide class of them) are able to provide in certain cases rather direct information on estimates of other useful quantities, such as the r.m.s. radii of the Λ orbitals, kinetic energies, etc. In addition two basic inequalities relating the ground-state mean square radius of the orbit of a particle in a central potential and its kinetic energy, respectively, to the spacing of the two lowest energy levels ΔE are investigated and further discussed in connection with the Λ -hypernuclei.