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Title: **High-Spin States in and around Doubly-Magic Nuclei**

Author(s): R. Broda[1] *et al.*
Affiliation(s): [1]*H. Niewodniczanski Institute of Nuclear Physics, Krakow, Poland*

The experimental study of high-spin states in the well established doubly-magic nuclei were for long time severely hampered by difficulties in accessing these nuclei in nuclear reactions suitable for the gamma spectroscopy. The situation changed when the development of large multi-detector gamma arrays offered resolving powers satisfactory to exploit very complex nuclear reactions, as deep-inelastic heavy-ion reactions or spontaneous fission, for spectroscopic studies. The progress achieved in such studies in recent years will be illustrated by reviewing the following results obtained in regions of doubly-magic nuclei:

1. High-spin states in the ^{48}Ca core and lowest yrast excitations in its 1 particle (hole) neighbors.
2. Valence proton structures in N=82 isotones of the ^{132}Sn region studied in spontaneous fission and in deep-inelastic heavy-ion reactions.
3. New high-spin states in the ^{208}Pb core and in the two-proton hole ^{206}Hg nucleus.

The shell model interpretation of observed states will be discussed and future prospects will be outlined.

Invited talk.