High Spin Physics 2001, Warsaw, February 6-10, 2001

Abstract No: 040
Submitted on: 16 Jan 2001, 16:21 GMT

Title: **Effective Field Theory for Rotational Bands in Deformed and Superdeformed Nuclei**

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An overview is given on the description of rotational bands in normally deformed and superdeformed nuclei in the framework of effective field theories such as the Relativistic Mean Field (RMF) theory or the Relativistic Hartree-Bogoliubov (RHB) theory. In particular we discuss recent investigations for the description of superdeformed bands in the $A \sim 30$, $A \sim 60$, $140-150$ and 190 mass regions and compare them briefly with the results obtained in non-relativistic mean field theories.

Invited talk.