Contribution ID: 69

Type: not specified

Nuclear Structure and Decay Data Evaluation

Monday 4 February 2019 14:25 (25 minutes)

Nuclear Data evaluation is a very essential part of Experimental nuclear research. The Nuclear Structure and Decay Data Evaluation evaluation is a source to many new experiments and new ideas, besides the standard-ization of experimental data.

Mass A=139 data evaluation led to a new experiment for measuring the half life of 139Ba which had several past measurements not in agreement. The same mass chain evaluation also dealt with several discrepancies, which were settled amicably. Similarly data evaluation

of many other mass chains has led to new questions. One important question is the quantum of measurement of half-life

values in all the experimentally known nuclei. The analysis throws up interesting numbers on these measurements, indicating large

number of nuclei have very small number of half life values measured.

Same is the story on the quantum of measurement of values of spins and parity values of these nuclei. In the talk

I will present some of these numbers.

Primary author: Prof. P.K.JOSHI (President IJSO Faculty member, Member EC, BASE. Room No. 106, NIUS building Homi Bhabha Centre for Science Education, Tata Institute of Fundamental Research V.N.Purav Marg Mankhurd Mumbai 400 088 India)

Presenter: Prof. P.K.JOSHI (President IJSO Faculty member, Member EC, BASE. Room No. 106, NIUS building Homi Bhabha Centre for Science Education, Tata Institute of Fundamental Research V.N.Purav Marg Mankhurd Mumbai 400 088 India)

Session Classification: Parallel Session Nuclear Physics