

Nuclear chirality & lifetime experiment

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Chirality in nuclear excited states involves spontaneous symmetry breaking of time-reversal T operation. This phenomenon is quite new as the first experimental proof of existence of chirality was given in 2006 by Warsaw team and only in 7 isotopes with chiral states have been found so far. The tool to detect and trace chirality is experimental nuclear gamma spectroscopy. On the seminar I will introduce chirality phenomenon, show experimental ways to detect it, and tell about the experiment held in the Warsaw Heavy Ion Laboratory in July 2022 titled "Search for chiral to not chiral transition by lifetime measurement of $I=10+$ state in ^{128}Cs with a PLUNGER technique.

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