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Coming back to the problem of the true ternary fission - actual view

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In the past, there were multiple attempts to find the so-called "true ternary fission"i.e. ternary fission with comparable masses of the fragments. So far, it has not been done, at least not in the frame of the traditional experimental approaches. In a series of our experiments, we have observed ternary partition of the heavy nuclei [1, 2] when one of the fragments of binary fission undergoes a break-up while passing through a solid-state foil. Among such events, there is a fraction of them with comparable masses of the resultant fragments. It should be stressed that the fragment undergoing a break-up is born in the shape isomer state [3]. In our presentation, we discuss a possible mechanism of the ternary partition leading to comparable masses of the fragments.

References

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Primary author: YURY, Pyatkov (FLNR)

Presenter: YURY, Pyatkov (FLNR)

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