FISSION FRAGMENTS BINARY BRAKE-UP AT CROSSING OF METAL FOILS

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In our previous publications [1–3] we discussed the new original effect appeared at crossing of the metal foils by fission fragments (FFs). In the series of recent experiments we have compared the mass of the FF before (Mtt) and after (Mte) it passes the foil event by event. In the light of the obtained results, an FF from conventional binary fission is supposed to be born in the shape isomer state which looks like a di-nuclear system consisting of the magic core and lighter cluster. Comparison of the correlation mass distributions Mtt-Mte for different metal foils is presented in order to test possible models of the effect.

1. Yu.V.Pyatkov *et al*. // Proceedings of the 22th International Seminar on Interaction of Neutrons with Nuclei. P.83.
2. Yu.V.Pyatkov *et al*. // International Symposium on Exotic Nuclei "EXON-2014", Conference proceedings, Editors: Yu.E.Penionzhkevich and Yu.G.Sobolev. Published by World Scientific Publishing Co. Pte. Ltd., 2015. P.383.
3. Yu.V.Pyatkov *et al*. // Int. Symposium on Exotic Nuclei "EXON-2016", Conference proceedings, Editors: Yu.E.Penionzhkevich and Yu.G.Sobolev. Published by World Scientific Publishing Co. Pte. Ltd., 2017. P.284.