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## Study of the $7\text{Be}$ cluster structure in relativistic fragmentation

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The BECQUEREL project [1-3] at the JINR is devoted systematic exploration of clustering features of light stable and radioactive nuclei. Stacks of pellicles of nuclear track emulsion provide a special opportunity to explore clustering of light nuclei (reviewed in [1]). The presented results on dissociation of  $7\text{Be}$  nuclei are demonstrate the progress in research carried out by the BECQUEREL Collaboration. The  $7\text{Be}$  nucleus is a source for the study of the states  $3\text{He} + 4\text{He}$ ,  $3\text{He} + 3\text{He} + n$ ,  $6\text{Li} + p$  and  $6\text{Be} + n$ . The pattern of fragmentation is important for understanding of the structure features of the nuclei  $8\text{B}$ ,  $9\text{C}$  and  $12\text{N}$  because the  $7\text{Be}$  nucleus plays the role of a core in them. The obtained in this experiment data are compared with the Geant4 and QMD simulation.

[1] P.I. Zarubin, Lect. Notes in Phys. 875, 51 (2013), arXiv:1309.4881.

[2] N.K. Kornegrutsa et al. Nucl. Phys. 76, 84 (2013).

[3] N.K. Kornegrutsa et al., Few-Body Systems 55, 1021 (2014), arXiv:1410.5162.

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