

## **New results of the Clusters and Hypernuclei formation study within PHQMD Model**

*Friday, 26 October 2018 16:35 (15)*

We present a new results on the dynamical modeling of cluster formation with the new combined PHQMD+FRIGA model at Nuclotron and NICA energies. The FRIGA clusterisation algorithm, which can be applied to the n-body transport approaches, is based on the simulated annealing technique to obtain the most bound configuration of fragments and nucleons. The PHQMD+FRIGA model is able to predict isotope yields as well as hyper-nucleus production. Based on present predictions of the combined model we study the possibility to detect such clusters and hypernuclei in the BM@N and MPD/NICA detectors.

**Primary author(s)**: KIREYEU, Viktor (JINR); LE FEVRE, Arnaud (GSI); BRATKOVSKAYA, Elena (GSI); AICHE-LIN, Joerg (SUBATECH); LEIFELS, Yvonne (GSI)

**Presenter(s)**: KIREYEU, Viktor (JINR)

**Session Classification** : Heavy Ion Physics

**Track Classification** : Nuclear physics: heavy ion