

PLPAC meeting 2024-1

Contribution ID : 1

Fragmentation dynamics of small poly-atomic molecules

Tuesday 23 Apr 2024 at 09:30 (00h15')

PI info :

Deepankar Misra

local collaborator info :

Deepankar Misra

Collaborators Name :

Harpreet Singh, Jibak Mukherjee, Kamal Kumar, Manojit Das

Motivation :

In the present experiment, we aim to perform swift highly charged ion collisions with small poly-atomic molecular systems. We aim to study the kinetic energy released distributions and angular distributions of the fragment ions. We also intend to study the emitted electrons in coincidence with the fragment ions in a home-built Reaction Microscope setup. We will study the breakup dynamics by measuring all the particles in the final state. Hence a kinematically complete experiment will be carried out.

Beam time requirement in shifts :

15

Beam :

^{12}C , ^{16}O , ^{19}F

Beam Energy :

30-50

Beam Current :

0.5

Beam Port :

Hall II 45D

Buncher Required :

yes

Target / Sample Details :

gaseous targets

Whether the experiment is part of PhD work ? :

yes

Whether the experiment is part of Post-Doc work ? :

No

information on the past beamtime at PLF :

9 shifts in 2023

Publication information related to prior work at the PLF :

No publications. It was a test experiment.

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Session classification : --not yet classified--

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