

PLPAC meeting 2024-1

Contribution ID : 23

Fission Fragment mass and TKE distribution of ^{216}Rn [$^7\text{Li} + ^{209}\text{Bi}$]

Monday 22 Apr 2024 at 12:50 (00h15')

PI info :

K. Mahata

local collaborator info :

NA

Collaborators Name :

V. Kumar, A. Shrivastava, K. Ramachandran, S. Pandit, V. V. Parker, S. Mukhopadhyay,
L. Danu, A. Kumar, S. Kaur, P. Mishra, P. Patale

Motivation :

Attached

Beam time requirement in shifts :

18

Beam :

Li^7

Beam Energy :

30-42

Beam Current :

5 pA

Beam Port :

Hall1-30 deg

Buncher Required :

yes

Target / Sample Details :

^{209}Bi

Whether the experiment is part of PhD work ? :

No

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

No

information on the past beamtime at PLF :

1. $^{12}\text{C}+^{175}\text{Lu}$ mass distribution data published
2. $^7\text{Li}+^{197}\text{Au}$ mass distribution data published
3. $^{16}\text{O}+^{175}\text{Lu}$ and $^{37}\text{Cl}+^{154}\text{Sm}$ evaporation residue measurement data analysis is in progress

Publication information related to prior work at the PLF :

1. "Observation of asymmetric fission in ^{204}Pb at low excitation energies" Vineet Kumar, K. Mahata, Sangeeta Dhuri, A. Shrivastava, K. Ramachandran et. al. *Phys. Rev. C* 109, 014613 (2024).
2. "Quest for understanding neutron emission in nuclear fission: The case of ^{210}Po " Sangeeta Dhuri, K. Mahata, K. Ramachandran, P. C. Rout, A. Shrivastava, et. al. *Phys. Rev. C* 108, 054609 (2023).
3. "Measurement of mass and total kinetic energy distributions for the $^{12}\text{C}+^{175}\text{Lu}$ system" Sangeeta Dhuri, K. Mahata, A. Shrivastava, K. Ramachandran, S. K. Pandit et. al. *Phys. Rev. C* 106, 014616 (2022).
4. K. Mahata, C. Schmitt, S. Gupta, A. Shrivastava, G. Scamps, and K.-H. Schmidt, *Phys. Lett. B* 825, 136859 (2022).

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Session classification : --not yet classified--

Track classification : --not yet classified--

Type : --not specified--