

Symposium on Nuclear Data 2020

Ag102 12.9 m	Ag103 65.7 m	Ag104 69.2m	Ag105 41.29 d	S ymposium on	Ag107 51.839 %	Ag108 2.37 m	Ag109 48.161 %	Ag110 24.6 s	Ag111 7.45 d	Ag112 3.130 %
Pd101 8.47 h	Pd102 1.02 %	Pd103 16.991 d	Pd104 11.14 %	Pd105 22.33 %	N uclear	Pd107 8.36 s	Pd108 26.46 %	Pd109 11.70029	Pd110 11.72 %	Pd111 33.4 m
Rh100 20.8 h	Rh101 3.3 y	Rh102 2.77 d	Rh103 100 %	Rh104 42.3 s	Rh105 37.98 h	D ata	2020 Nov.	Rh108 3.1 m	Rh109 89 s	Rh110 3.3 s

Contribution ID: 38

Type: **Poster Presentation**

Experimental program of nuclear data for accelerator-driven nuclear transmutation system using FFAG accelerator –First subprogram: spallation neutron measurement / FFAG 加速器を用いた加速器 駆動核変換システムのための核データ測定: 核破碎中 性子測定

Thursday, 26 November 2020 17:00 (1h 50m)

For accurate prediction of neutronic characteristics for accelerator-driven system (ADS) and a source term of spallation neutrons for reactor physics experiments for the ADS at Kyoto University Critical Assembly (KUCA), we have launched an experimental program to measure nuclear data on ADS using the Fixed Field Alternating Gradient (FFAG) accelerator at Kyoto University (Period: October 2019 –March 2023). This program is composed of two subprograms, focusing on two nuclear reaction mechanisms, (1) spallation reactions and (2) high-energy fission, for incident proton energies from several tens of MeV to 100 MeV. In the first subprogram, we will measure neutron energy spectra of double-differential cross-sections (DDXs) and thick-target neutron-yields (TTNYs) for several targets (i.e. Pb, Bi, Fe, etc.); in the second subprogram, fission fragment mass number induced from heavy targets (i.e. Pb, Bi) will be measured. In this poster session, the present status of the first subprogram will be presented.

Primary author: Dr NAKANO / 中野, Keita / 敬太 (JAEA / JAEA)

Co-authors: Dr IWAMOTO / 岩元, Hiroki / 大樹 (JAEA / JAEA); Dr MEIGO / 明午, Shin-ichiro / 伸一郎 (J-PARC Center, Japan Atomic Energy Agency (JAEA), Japan); Dr NISHIO/西尾, Katsuhisa/勝久 (JAEA/日本原子力研究開発機構); Dr ISHI / 石, Yoshihiro / 禎浩 (Kyoto University / 京都大学); Dr HIROSE / 廣瀬, Kentaro / 健太郎 (JAEA / JAEA); Dr IWAMOTO / 岩元, Yosuke / 洋介 (JAEA / JAEA); Dr KURIYAMA / 栗山, Yasutoshi / 靖敏 (Kyoto University / 京都大学); Dr MAEKAWA / 前川, Fujio / 藤夫 (JAEA / JAEA); Dr MAKII / 牧井, Hiroyuki / 宏之 (JAEA / JAEA); Dr OKABE / 岡部, Kota / 晃大 (JAEA / JAEA); Dr RICCARDO, Orlandi (JAEA / JAEA); Dr OIZUMI / 大泉, Akito / 昭人 (JAEA / JAEA); Dr SATO / 佐藤, Daiki / 大樹 (JAEA / JAEA); Dr SUZAKI / 洲崎, Fumi / ふみ (JAEA / JAEA); Dr TSUKADA / 塚田, Kazuaki / 和明 (JAEA / JAEA); Dr UESUGI / 上杉, Tomonori / 智教 (Kyoto University / 京都大学); Dr YASHIMA / 八島, Hiroshi / 浩 (Kyoto University / 京都大学)

Presenter: Dr NAKANO / 中野, Keita / 敬太 (JAEA / JAEA)

Session Classification: Poster