Ag102	Ag103	Ag104	Ag105	**S**	Ag107	Ag108	Ag109	Ag110	Ag111	Ag112
12.9 m	65.7 m	69.2m	41.29 d	ymposium on	51.839 %	2.37 m	48.161 %	24.6 s	7.45 d	3.130 h
Pd101	Pd102	Pd103	Pd104	Pd105	**N**	Pd107	Pd108	Pd109	Pd110	Pd111
8.47 h	1.02 %	16.991 d	11.14 %	22.33 %	uclear	6.5e+6 y	26.46 %	13.7012h	11.72 %	23.4 m
Rh100	Rh101	Rh102	Rh103	Rh104	Rh105	**D**	**2020**	Rh108	Rh109	Rh110
20.8 h	3.3 y	207 d	100 %	42.3 s	35.36 h	ata	Nov.	9.0 m	80 s	3.2 s

Contribution ID: **25** Type: **Oral Presentation**

Nuclear data generation using machine learning

We have developed a method to generate nuclear data using Gaussian process regression (GPR) [1], which is one of the machine learning techniques. This method generates nuclear data by treating measured data as the training data in machine learning. GPR is based on nonparametric Bayesian inference, the generated nuclear data are expressed as a predictive distribution including uncertainty information. In this presentation, the basics of the Gaussian process model, some examples of the application to nuclear data generation, and other related topics will be presented.

[1] H. Iwamoto, "Generation of nuclear data using Gaussian process regression", Journal of Nuclear Science and Technology, 50:8, 932-938 (2020).

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