Proposal Number (User Support Office use only)

Date: _____

Proposal for Nuclear Physics Experiment at RI Beam Factory

(RIBF NP-PAC-23, 2022)

Title of Experiment	
Category	[] NP experiment [] Detector R&D [] Construction [] Update proposal (Experimental Program: NP)
	[] Re-evaluation (Experimental Program: NP)
Experimental	[] GARIS [] RIPS [] CRIB [] KISS
Devices	[] BigRIPS [] Zero Degree [] SHARAQ [] OEDO
Devices	[] RI Ring [] SAMURAI
Detectors	[] DALI2 [] GRAPE

Spokesperson (Only one person, Multiple spokespersons not accepted) :

Name	
Institution	
Title of position	
Address	
Tel	Fax
Email	

Co-Spokesperson (If any):

<u> </u>	
Name	
Institution	
Title of position	
Address	
Tel	Fax
Email	

In-House Contact Person (If any):

Name	
Institution	
Title of position	
Address	
Tel	Fax
Email	

Beam Time Request Summary:

Please indicate requested beam times of $T_{User-Tuning} \& T_{User-Data Run}$ only. $T_{BigRIPS}$ and Total times will be given by RIKEN.

	7 BigRIPS : Tuning time with BigRIPS for secondary beam settings	(User Support Office use only)	Days
Total Beam Time	Tuser-Tuning : Tuning time for users' own equipment and/or detectors using primary / secondary beams		Days
	T_{User-Data} Run: Beam-time for data runs		days
	TOTAL	(User Support Office use only)	days

Beam summary

Primary Beam:

Particle Energy	(E/A MeV) Inten	sity (pnA)

Secondary Beams:

RI Beams			Beam-on-Target Time for DATA RUN	
Isotope	Energy (<i>E/A</i> MeV)	Rate of Isotope (/s)	Total Beam Rate @ F3 (/s)	Days

Fill each row for each BigRIPS setting, with objective isotope, its energy, rate, and total beam rate which cannot exceed 10⁷/s in BigRIPS due to radiation regulation.

Keywords:

[]] New isotope search	
[]] Lifetime measurement	
[]] Mass measurement	
[]] Superheavy element	
[]] β-γ spectroscopy	
[]] In-beam γ-ray spectroscopy	
	[] 2 ⁺ 1 study	
[]] Nucleosynthesis	
	[] r process [] rp	process
[]] Nuclear structure	
	around [] ³² Mg [] ⁴² S	Si [] ⁷⁸ Ni
	[] ¹⁰⁰ Sn [] ¹³²	Sn [] Others ()
[]] Nuclear reaction	
[]] Shell evolution	
[]] Nuclear moment	
[]] Spin-isospin excitation	
[]] Nuclear force	
[]] Nuclear equation of state	
[]] Exotic atom	
[]] Others ()

Readiness

Estimated date ready to run the experiment	
Dates which should be excluded, if any	

Summary of Experiments

Name	iors (including spokesperso Institution	Country of location	Title or position
		• • • • • • • • • • • • • • • • • • •	

List of Collaborators (including spokesperson)

Detailed Description of the proposed experiment

Please describe in details about the proposed experiment, where the format is free. They should include;

- 1. Goals and methods of the proposed experiment
- 2. Estimation of beam time requested
- 3. Experimental conditions such as beam conditions, targets and detectors
- 4. Readiness