



RIKEN
NiSHiNA
CENTER

Discussions

Shunji Nishimura, Pieter Doornenbal

西村 俊二, ピーター ドルネンバル



June 3, 2011



Discussion Points

Collaboration

Physics Case

Schedule

Structure

Work Tasks

- Name
- Collaboration
- Experimental proposals
- Schedule
- Organizational structure
 - ❖ Collaboration board
- Work tasks



Collaboration



Collaboration Name

Collaboration

❖ Name

❖ Joining

Physics Case

Schedule

Structure

Work Tasks

- Any Suggestions?



Collaboration Name

Collaboration

❖ Name

❖ Joining

Physics Case

Schedule

Structure

Work Tasks

- Any Suggestions?
- E(U)RICA
- EURICA
- ERICA



How to Join Collaboration

Collaboration

❖ Name

❖ **Joining**

Physics Case

Schedule

Structure

Work Tasks

- Send email to euroball@riken.jp or eurica@riken.jp



How to Join Collaboration

Collaboration

❖ Name

❖ **Joining**

Physics Case

Schedule

Structure

Work Tasks

- Send email to euroball@riken.jp or eurica@riken.jp
- We will send reminder two weeks from now



Physics Case



^{48}Ca primary Beam

Collaboration

Physics Case

❖ ^{48}Ca

❖ ^{78}Kr

❖ ^{86}Kr

❖ ^{124}Xe

❖ ^{136}Xe

❖ ^{238}U

❖ Summary

Schedule

Structure

Work Tasks

- Z.H. Li *et al.*, ^{42}Si region

⁷⁸Kr primary Beam

Collaboration

Physics Case

❖ ⁴⁸Ca

❖ ⁷⁸Kr

❖ ⁸⁶Kr

❖ ¹²⁴Xe

❖ ¹³⁶Xe

❖ ²³⁸U

❖ Summary

Schedule

Structure

Work Tasks

- B. Rubio *et al.*
- B. Blank *et al.*
- de Angelis *et al.*

⁵⁸Zn and above

⁵⁹Ge, ⁶³Se, ⁶⁷Kr

⁷¹Kr



^{86}Kr primary Beam

^{55}Ca

^{77}Ni

- Valiente-Dobon *et al.*
- Sahin *et al.*

Collaboration

Physics Case

❖ ^{48}Ca

❖ ^{78}Kr

❖ ^{86}Kr

❖ ^{124}Xe

❖ ^{136}Xe

❖ ^{238}U

❖ Summary

Schedule

Structure

Work Tasks



^{124}Xe primary Beam

Collaboration

Physics Case

❖ ^{48}Ca

❖ ^{78}Kr

❖ ^{86}Kr

❖ ^{124}Xe

❖ ^{136}Xe

❖ ^{238}U

❖ Summary

Schedule

Structure

Work Tasks

● A. Gadea *et al.*

● M. Letwitowicz, R. Krücken, S. Nishimura *et al.*

^{78}Zr

^{100}Sn



^{136}Xe primary Beam

^{124}Pd region

- H. Watanabe *et al.*

Collaboration

Physics Case

❖ ^{48}Ca

❖ ^{78}Kr

❖ ^{86}Kr

❖ ^{124}Xe

❖ ^{136}Xe

❖ ^{238}U

❖ Summary

Schedule

Structure

Work Tasks

²³⁸U primary Beam

Collaboration

Physics Case

❖ ⁴⁸Ca

❖ ⁷⁸Kr

❖ ⁸⁶Kr

❖ ¹²⁴Xe

❖ ¹³⁶Xe

❖ ²³⁸U

❖ Summary

Schedule

Structure

Work Tasks

- A. Odahara *et al.* $Z = 32,34,36,52,54,56$
- D. Verney *et al.* ⁷⁸Ni region
- S. Nishimura *et al.* ⁷⁸Ni
- G. de Angelis *et al.* ¹¹⁰Zr
- T. Sumikama *et al.* ¹¹⁰Zr
- G. Lorusso *et al.* ¹²⁸Pd region
- A. Gadea, A. Jungclaus, G. Simpson *et al.* ¹³⁴Cd region
- H. Watanabe *et al.* ¹⁷⁰Dy
- E. Ideguchi, T. Bäck *et al.* ¹¹²Mo region



Summary of Experiments

Collaboration

Physics Case

❖ ^{48}Ca

❖ ^{78}Kr

❖ ^{86}Kr

❖ ^{124}Xe

❖ ^{136}Xe

❖ ^{238}U

❖ **Summary**

Schedule

Structure

Work Tasks

Beam	Experiments
^{48}Ca	1
^{78}Kr	3
^{86}Kr	2
^{124}Xe	2
^{136}Xe	1
^{238}U	9

Summary of Experiments

Collaboration

Physics Case

❖ ^{48}Ca

❖ ^{78}Kr

❖ ^{86}Kr

❖ ^{124}Xe

❖ ^{136}Xe

❖ ^{238}U

❖ **Summary**

Schedule

Structure

Work Tasks

Beam	Experiments
^{48}Ca	1
^{78}Kr	3
^{86}Kr	2
^{124}Xe	2
^{136}Xe	1
^{238}U	9

Country	Experiments
Japan	7.83
Italy	4.00
France	2.66
Spain	2.66
Sweden	0.50
Germany	0.33



Schedule

E(U)RICA Status and Time-line

- April: Sent Letter of Intent to Gammapool
- Last week: Construction proposal for 9th RIBF NP-PAC submitted
- Today: 1st E(U)RICA Workshop
- Proposed time-line:

Task \ Time	2011									2012		
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Letter of Intent												
Last PreSpec Experiment												
E(U)RICA Workshop												
Construction Proposal												
Disass. of PreSpec Array												
MoU and Proposal												
Shipment of Support Structure												
Shipment of Electronics												
Shipment of Detectors												
Construction of LN2 Pipeline												
Construction of Rail System												
Assembling of E(U)RICA												
Beam Time at RIBF												
E(U)RICA Commissioning												
RIBF NP-PAC Meeting												
E(U)RICA Experiments												



Organizational Structure



Organizational Structure

Collaboration

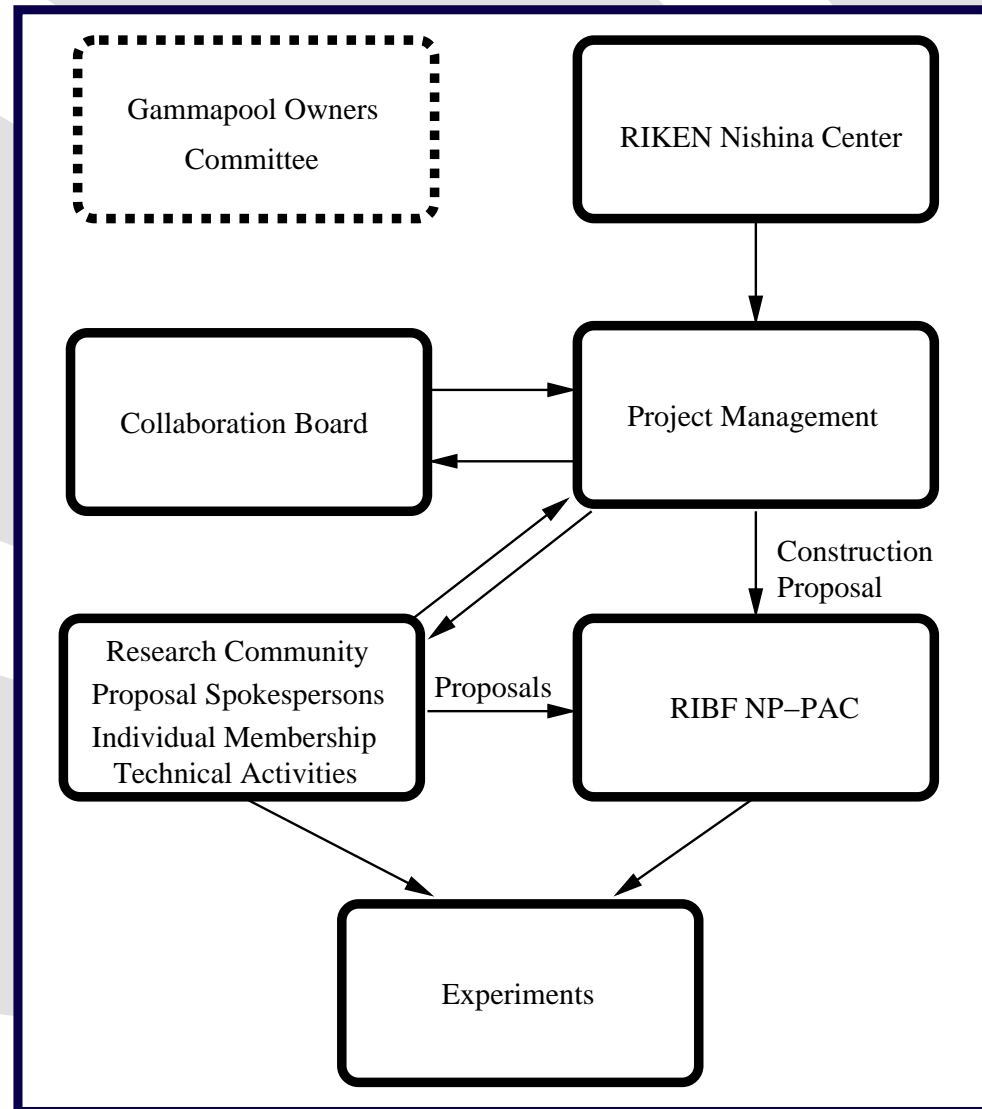
Physics Case

Schedule

Structure

❖ Structure

Work Tasks





Work Tasks



Work Tasks

Collaboration

Physics Case

Schedule

Structure

Work Tasks

❖ Work Tasks

- Infrastructure

- ❖ Liquid nitrogen pipeline
- ❖ Liquid nitrogen filling system
- ❖ UPS system
- ❖ power converter
- ❖ cables

- Mechanics

- ❖ support structure
- ❖ rail system

- Logistics

- ❖ Shipment of detectors, electronics, support structure

- Electronics

- Data acquisition and analysis



Summary

Collaboration

Physics Case

Schedule

Structure

Work Tasks

❖ Work Tasks



THE END



Collaboration

Physics Case

Schedule

Structure

Work Tasks

Backup slides from now