

「日本の核物理の将来」
についてのレポート作成WG
第一回代表者会議
Discussion(今後に向けて)

2011年2月22日
@理研仁科センター

中村隆司

「日本の核物理の将来」WG世話人代表

Facility upgrade/construction?

- 不安定核(青井)-- RIBF
- 高エネルギー(郡司) — LHC/RHIC/FAIR/J-PARC
- Hadron (大西)--理研／J-PARC,ほかの施設との関連(特徴)
- 精密核物理(若狭)-- RCNP
- ハイパー核(高橋)-- J-PARC/JLAB
- 基礎物理(北口)-- UCN @J-PARC
- 核子構造(後藤)--- Fermi LAB etc.
- 計算核物理(清水)-- 次世代スパコン

それぞれのFacility(~10年後くらい)の特長
20-30年後のFacility?

- 1.Overview and Recommendations . 3 NSAC Long Range Plan
- 2.The Science. 13 2007
 - Quantum Chromodynamics: From the Structure of . Hadrons to the Phases of Nuclear Matter. 14
 - QCD and the Structure of Hadrons. 16
 - The Phases of Nuclear Matter. 35
 - The Emerging QCD Frontier: The Electron-Ion Collider. 50
 - Nuclei: From Structure to Exploding Stars. 57
 - In Search of the New Standard Model . 75
- 3.The Tools of Nuclear Science. 93
 - Facilities for Nuclear Science. 94
 - International Collaborations and Facilities . 112
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章立て(NSAC LRP方式)

- Preface
- The Science
 - I. Hadrons and ...
 - Overview
 - Fundamental Questions
 - Recent Achievements
 - Future Program (10 years)
 - Fundamental Questionsに応じて
(20years)
 - Outlook (facility, detectors)
 - II. ...
- The Tools of Nuclear Science
 - Facility (domestic)
 - International collaboration and Facility

今後の方針

- Homework (Town meeting まで)
 1. Questionsの設定, Keywords
 2. Resourceの算定
 3. First version
- Town Meeting 4/1-2, 5/6-7?
RCNP or KEK or J-PARC