●物理学 Physics

1. 所属構成員等

准教授　　小野裕明
講師　　渡辺みのり（併任）

2. 研究テーマ

1. Belle II 実験のための分散コンピューティングシステムの研究 R&D of distributed computing system for Belle II experiment
2. ILC実験のための分散コンピューティングシステムの研究 R&D of distributed computing system for ILC experiment
3. ILC実験のためのカロリメータ検出器開発研究 R&D of calorimeter detector for ILC experiment
4. 原子炉ニュートリノ検出器の開発 Development of reactor neutorino monitor
5. 常温硬化プラスチックシンチレータの開発 Development of plastic scintillator cured at room temperature

3. 今年度の研究上の特筆すべき事項

学会賞

記載事項なし

特許

記載事項なし

4. 学位取得者

記載事項なし

5. 主催学会等

記載事項なし

6. 国際交流状況

1. 新潟大学と共同でフィリピンミンダナオ州立大学イリガン工科校との共同研究を行なっている。
2. 国際リニアコライダー(ILC)実験のILD検出器グループ・CALICEグループに参加し、国際共同研究を行なっている。特にILDソフトウェアグループではシミュレーションデータ生成の共同責任者としての役割を担っている。
3. 国際共同実験Belle/Belle IIグループに参加し、DIRACシステムを用いたシミュレーションデータ生成のための計算資源の提供・管理、コンピューティンググループのエキスパートとしてデータ生成モニタリングの役割を担っている。

7. 外部研究費

1. 科学研究費補助金, 若手研究B, (継続), 2018, B・Li含有プラスチックシンチレータの開発と中性子位置検出器への応用, 渡辺みのり(代表), 1950000円
2. 科学研究費補助金, 基盤研究C, (新規), 2019, 常温硬化プラスチックシンチレータの基本性能向上と高機能化に向けた研究, 小野裕明(代表), 1690000円

8. 研究業績

A. 著書

記載事項なし

B. 原著

1. Casarosa G, (Belle II SVD collaboration), Watanabe M (91th) (98 authors). Commissioning of the Belle II Silicon Vertex Detector. ☆◎Nucl.Instrum.Meth. A. 2020; 958: 162184-1-4. doi : 10.1016/j.nima.2019.05.025.
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C. 解説・総説
記載事項なし

D. 報告・紀要
特記事項なし

E. 翻訳
特記事項なし

F. 学術大会（口演・ポスター発表）・講演会・研究会・研修会等での講演
1. Eisuke Saito, Hitoshi Miyata, Takuro Koike, Yuhi Sonobe, Keito Toda, Yukito Fujima, Hiroaki Ono, Minori Watanabe, Makoto Sato, Akinori Umeyama, Masaaki Tamura, Takahito Suzuki. Improvement of long-term stability of newly developed plastic scintillator for practical use. MBE10, 奈良市, 2019年6月25～27日
2. Eisuke Saito, Hitoshi Miyata, Takuro Koike, Yuhi Sonobe, Keito Toda, Yukito Fujima, Hiroaki Ono, Minori Watanabe, Makoto Sato, Akinori Umeyama, Masaaki Tamura, Takahito Suzuki. Improvement of long-term stability of newly developed plastic scintillator for practical use. 21st SPVM National Physics Conference, フィリピン マニラ市, 2010年10月17～19日
3. Hiroaki Ono, Kiyoshi Hayasaka. Japanese University site resources. 34th Belle II general meeting, つくば市 (リモート講演), 2019年10月21～25日
4. Hiroaki Ono. DC operation shift summary. 35th Belle II general meeting, つくば市 (リモート講演), 2020年2月3～7日

8-G 講演
1) 特別講演・シンポジウム等での講演
1. 小野裕明. ILCが切り拓く測定器技術応用. 日本物理学会 年次大会, シンポジウム講演, 名古屋市, 2020年3月17日