

# シリコンセンサー-EIC

理研  
中川格

# コラボレーションについて

- Rachid Nouicer氏(BNL)から4PIHYDEICへの参加の打診があった(理研、KEK)
- KEKとしては正式な要請を待っている状態。
- 理研は参加表明した？
- Rachid氏によると、KEKは既に名を連ねておりコラボレーションに参加している認識。理研は返答待ち。
- それぞれに認識に齟齬があるが、KEK、理研共々「一緒にやる」という事を明確に伝えて、先に進める所存。

# Project Member: International Collaboration

## Project members have extensive record on the construction of silicon detectors:

- Silicon strip detector
- Silicon pixel detector
- Silicon hybrid pixel
- SOIMPXD
- UFSD: LGAD, AC-LAGD
- Silicon readout electronic
- Silicon assembly
- Cooling system
- Integration
- Commissioning
- And more

### Project Members:

Whitney Armstrong, Manoj Jadhav, Sylvester Joosten, Jessica Metcalfe, and Zein-Eddine Meziani

Argonne National Laboratory, 9700 S. Cass Avenue, Lemont, IL 60439, United States

Daniel Cacace, Giacomini Gabriele, John Haggerty, David Lynn, Eric Mannel, Gerrit van Nieuwenhuizen, Rachid Nouicer, and Robert Pisani

Brookhaven National Laboratory, Upton, NY 11973, United States

Yasuo Arai, Akimasa Ishikawa, Yoichi Ikegami, Ikuo Kurachi, Toshinobu Miyoshi, Manabu Togawaand, and Toru Tsuboyama

High Energy Accelerator Research Organization KEK, Tsukuba, Japan

Miho Yamada

Tokyo Metropolitan College of Industrial Technology, Tokyo, Japan

Simone Mazza, Hartmut Sadrozinski, Bruce Schumm, and Abraham Seiden

University of California, 1156 High Street Santa Cruz, CA 95064, United States

Kazuhiko Hara

University Tsukuba, Tsukuba, Japan



## We welcome people/institutions to join the project

# 短期的なスケジュールについて

The screenshot displays a Zoom meeting window. The main content is a LaTeX editor interface for a paper titled "4π Silicon Hybrid Detector with Charged Particle Identification and Highest Position Resolution for an Experiment at EIC". The editor shows the source code on the left and the rendered PDF on the right. The rendered PDF includes the title, authors (Whitney Armstrong, Manoj Jadhav, Sylvester Joosten, Jessica Metcalfe, Zein-Eddine Meziani, Daniel Cacace, Giacomo Gabriele, John Haggerty, David Lynn, Eric Mannel, Gerrit van Nieuwenhuizen, Rachid Nouicer, Robert Pisani, Yasuo Arai, Akimasa Ishikawa, Yoichi Ikegami, Ikno Kurachi, Toshinobu Miyoshi, Manabu Togawa, Toru Tsuboyama, Miho Yamada, Simone Mazza, Hartmut Sadrozinski, Bruce Schumm, Abraham Seiden, and Kazuhiko Hara), affiliations, the date (September 30, 2020), and an abstract. The abstract describes the development of a 4π silicon hybrid detector for the EIC experiment, highlighting its high position resolution and radiation hardness. A notification at the bottom of the Zoom window states "bluejeans.com is sharing your screen." Two video thumbnails are visible at the bottom of the Zoom window, one for Rachid Nouicer.

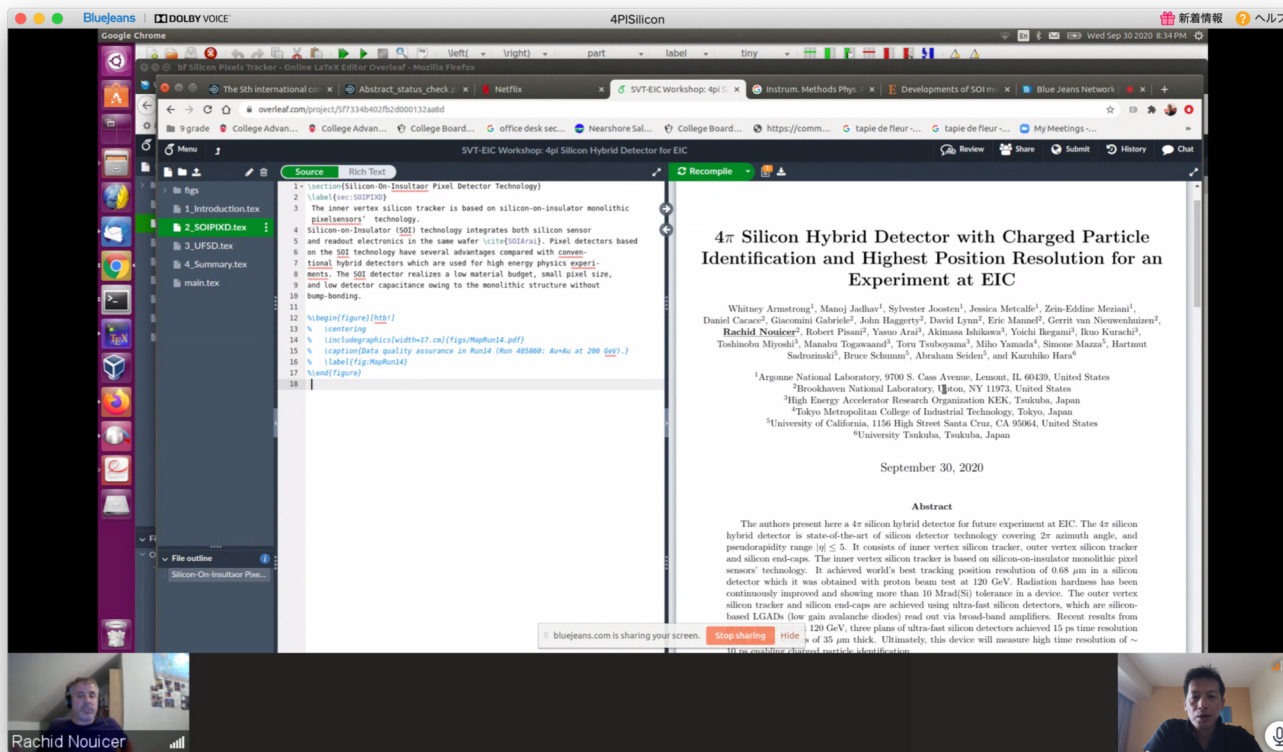
# Silicon Section for Yellow Report

- Yellow Reportのsilicon trackerセクション用の材料として、Rachidがドラフトを執筆中
- 今週中に著者リストにドラフトを流す予定
- 著者は一読の上、Rachidにフィードバックをかける

## 今後の予定

- 日本グループはSOI検出器の性能テストを引き続き行う
- Yellow Reportがすんだら、全体ミーティングを企画する

backup



- Are we ready to include RIKEN in this list?
- Appears in the 4pi-silicon collaboration list of EOI

Feedback is expected.



- Radiation hardness isolation layer in SiO<sub>2</sub>
- Developing technical material to silicon tracker section of yellow report and feed to Barbara for yellow report.
- Up to committee 1IR in yellow report, squeeze in into
- Collection of collaborators is important to appeal the reality
- This week Rachid will circulate the documentation and expect feedback from co-authors.
- Japanese Silicon Technology (HPK,···) are attractive option for the 4pi silicon project
- Phase-I silicon module
- Phase-II ladder
- Phase-III tracker

# Post Yellow Report

- Silicon oxide is the responsibility for Japanese collaboration perhaps with ATLAS group.
- Single side is
- November all hands meeting.
- LAPIS produces (Japanese company) silicon wafers