

2024 Instrumentation Division (TID ID) strategy working page

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Introduction and goals

This is the working page of how we define the instrumentation division strategy within TID. Here you can find what we will do, how you can contribute and what we have done. Most of the work will happen from February till June to discuss questions about our organizations and topics we work on, this will result in a ID strategy presentation in August 2023. We ask you to contribute as part of the instrumentation division by filling in our first survey, attending the monthly focus groups, attending the monthly topical seminars and finally approving and applying the resulting strategy. If you have any questions, or any feedback on the process, let Sander Breur know as he is spearheading this effort.

Useful links:

- [Slide deck on ID strategy](#)
- [Overview of current funding opportunities](#)

Useful materials:

Quantum:

- DOE on [Quantum Information Science](#)
- topical session slides: [230223 Paul Quantum we do and quantum we don't.pdf](#) and [230223 Quantum Perspective_Dale.pdf](#)

high-energy physics:

- a .The Report of DOE's Office of Science Basic Research Needs (**BRN**) for HEP Detector R&D that was published in 2019: <https://www.osti.gov/servlets/purl/1659761>; and
- b. The European Committee for Future Accelerators (ECFA) 2021 Detector R&D (DRD) Roadmap: <https://cds.cern.ch/record/2784893>.
- c. The 2021 – 2022 **Snowmass** Study report: <https://arxiv.org/abs/2301.06581>
- d. The **P5** report: <https://www.usparticlephysics.org/2023-p5-report/>
 - **short summary of P5: short version P5-HEPAPv2.pdf**
- ECFA Detector R&D Roadmap Task Force 6: Calorimetry Community Meeting: <https://indico.cern.ch/event/1212696/>
- topical session slides:
 - [2023.03.29 ID Strategy CMB Cosmology.pdf](#)
 - [DUNE_tech.pdf](#)
 - [Higgs-10-Vernieri \(1\).pptx](#)
 - [HPSidChat230321.pdf](#)
 - [Instrumentation needs for 0.pptx](#)
 - [SLAC HEP Instrumentation - Rubin LSST Challenges \(Opportunities\).pptx](#)

microelectronics:

- BRN for Microelectronics: [Basic Research Needs for Microelectronics](#)

Activities done/ongoing:

ID communication:

- ☒ Create common calendar to track opportunities
- ☐ Create common slide deck for conferences
- ☐ Track interesting conferences to make sure we are represented
- ☐ Add technology list on external website

Building improvements:

- ☒ Order and install new plotter in building 84
- ☒ Hang scientific engineering posters in integrated circuits hallway
- ☒ Install display case at side entrance of building 84
- ☐ put up department signs
- ☐

Sign-up sheets for events of this month:

For those attending the focus group or instrumentation seminar we will provide a simple selection of sandwiches, one piece of fruit and a cup of coffee. But only if you sign up at least 24 hours before in the sign-up sheet and only for the first 10 due to budget restrictions!

(You are welcome to bring your own lunch)

topic	date	time	location	Sign-up sheet	zoom
Focus session: what are our weaknesses and threats?	Wednesday, April 26	12:00 – 1:00 PM	Ballam (188) conference room in building 84 (first floor)	https://docs.google.com/spreadsheets/d/177sRhzcIboSZCiG7nxqrLHBsxSyV43vfBZU2HLBK1uM/edit#gid=0	In person only

Full Calendar of events:

Every month we try to have one focus session on the second Wednesday of the month, and one topical seminar on the third Wednesday of the month. The focus sessions are only in person and meant to discuss answers on the specific question about our organization. The instrumentation seminars will have several speakers giving short five-minute introductions from different viewpoints after which the goal is to have questions and discussions to identify what future opportunities there are within this topic. The outcomes from these focus sessions and instrumentation seminars are then used as the starting point by the department heads to determine a coherent ID strategy. Every event is open to everyone within instrumentation.

topic	date	time	location	Sign-up sheet	zoom
Focus group: What are our strengths? (+ Questions on quantum)	Wednesday, February 15	12:00 – 1:00 PM	Ballam (188) conference room in building 84 (first floor)	https://docs.google.com/spreadsheets/d/16tHQAspRHipnIF1qf-CV2QSLtLeavnURAPBKHM_Es/edit?usp=sharing	In person only
Instrumentation seminar: Q: quantum we do and quantum we don't	Wednesday, February 22nd	12:00 – 1:00 PM	Ballam (188) conference room in building 84 (first floor)	https://docs.google.com/spreadsheets/d/1C2ZCAWbhcAWHDPwm0MS159lbwCv4Oim6nT1XTRSc7Civ/edit?usp=sharing	https://stanford.zoom.us/j/6723568666?pwd=eGxoSEs0ODc2UDDjL0NWR3RNSUZ3dz09
Instrumentation seminar: hi gh-energy physics part 1	Wednesday, March 29	12:00 – 1:00 PM	Ballam (188) conference room in building 84 (first floor)	https://docs.google.com/spreadsheets/d/1y28DeEmnSBgBo64MikueZzW3jNmE1MfODPyXjlo4C5k/edit#gid=0	https://stanford.zoom.us/j/6723568666?pwd=eGxoSEs0ODc2UDDjL0NWR3RNSUZ3dz09
Instrumentation seminar: hi gh-energy physics part 2	Wednesday, April 5	12:00 – 1:00 PM	Ballam (188) conference room in building 84 (first floor)	https://docs.google.com/spreadsheets/d/1_w5gBFZSicW95XbqvMhmxAF_KZzWhl6XAqQz7UuE/edit?usp=sharing	https://stanford.zoom.us/j/6723568666?pwd=eGxoSEs0ODc2UDDjL0NWR3RNSUZ3dz09
Instrumentation seminar: photon science	Wednesday, May 17	12:00 – 1:00 PM	Ballam (188) conference room in building 84 (first floor)	https://docs.google.com/spreadsheets/d/1o7_w9ZBJZrflb2QL_6fywgQnijKj48g2vkvHJblqTzY/edit#gid=0	https://stanford.zoom.us/j/6723568666?pwd=eGxoSEs0ODc2UDDjL0NWR3RNSUZ3dz09
Instrumentation seminar: microelectronics	Wednesday, May 24	12:00 – 1:00 PM	Ballam (188) conference room in building 84 (first floor)	https://docs.google.com/spreadsheets/d/1IkLQUITYL4IXyiq6ZKX7T_NGqnHefhM0Up7q5FR3SZU/edit#gid=0	https://stanford.zoom.us/j/6723568666?pwd=eGxoSEs0ODc2UDDjL0NWR3RNSUZ3dz09
Focus session: how do we want to grow and collaborate?	Wednesday, June 14	12:00 – 1:00 PM	Ballam (188) conference room in building 84 (first floor)	https://docs.google.com/spreadsheets/d/11kc8W2P1Vx2Bfjkm_mpPIOEj2HkXLVAjXE-CrRAIQ/edit#gid=0	In person only
Instrumentation seminar: TBD on security, medicine, space?	Wednesday, June 21	12:00 – 1:00 PM	Ballam (188) conference room in building 84 (first floor)	https://docs.google.com/spreadsheets/d/1ulj7ZltOt8lCK_xil4bldFE4desCR6BSlonlFDzula/edit#gid=0	https://stanford.zoom.us/j/6723568666?pwd=eGxoSEs0ODc2UDDjL0NWR3RNSUZ3dz09

The following events are to discuss a draft strategy and to present the final instrumentation strategy to everyone within our division, within TID and within SLAC.

topic	date	time	location	Sign-up sheet	zoom
Feedback session on preliminary ID strategy	Friday, June 28				
ID final strategy presentation	Thursday, August 17		Redwood		