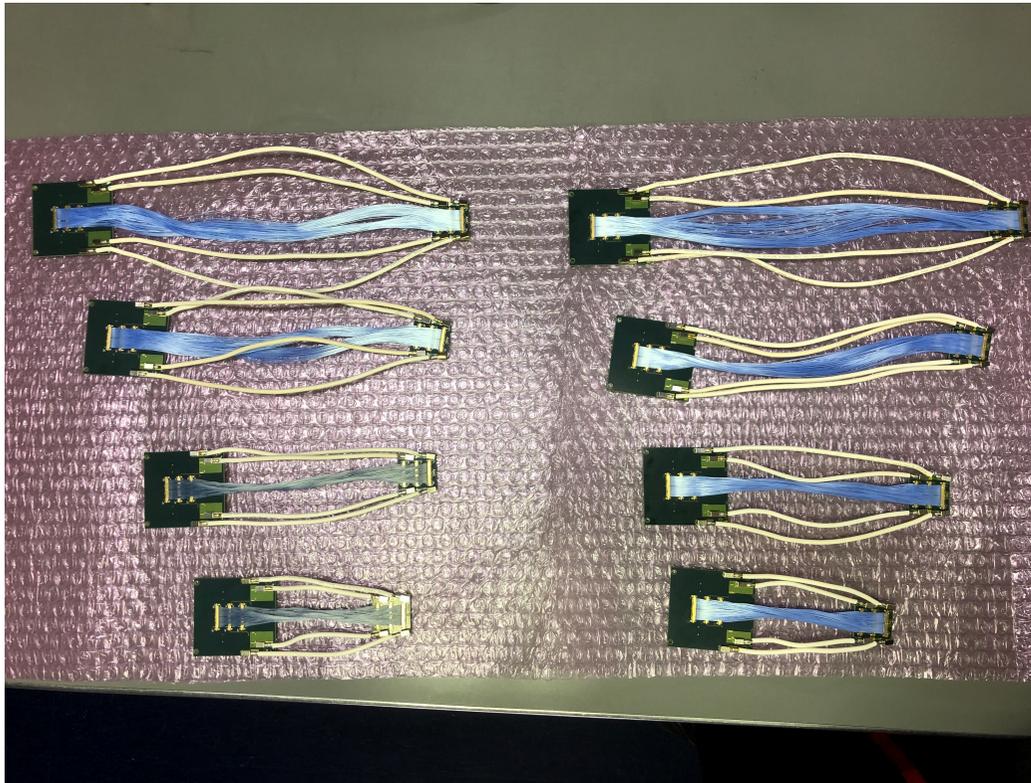


# Status Report

RIKEN/RBRC

Itaru Nakagawa

# Prototype-II Conversion Cables



- Delivered May 20<sup>th</sup>, 2022 to RIKEN
- Type AC & Type BD
  - Harness length: 10cm, 15cm, 20cm, 25cm
- Channel map consistency check, calibration data taking, physical interference between connectors at ROC are under test in RIKEN by Rikkyo students.
- Details are to be reported by Hikaru Imai next week.
- The plan is to export 4 cables to BNL in early June.

# sPHENIX Juniors Information:

- ▶ sPHENIX Juniors Wiki page:
  - ▶ <https://wiki.bnl.gov/sPHENIX/index.php/Juniors>
- ▶ Please join the sPHENIX juniors mailing list:
  - ▶ [lists.bnl.gov/mailman/listinfo/sphenix-juniors-l](https://lists.bnl.gov/mailman/listinfo/sphenix-juniors-l)
- ▶ Mattermost channel:
  - ▶ <https://chat.sdcc.bnl.gov/sphenix/channels/sphenix-juniors>

Students/Postdocs are encouraged to sign up!

# INTT Performance Open Questions

- ADC response as a function of the bias voltage
  - 100V@Fermi 2019 vs. 50V@Tohoku 2021
  - Bias scan result with source
- Offset 200mV or 280mV is question, but this doesn't explain
  - MIP position vs single+double hit methods conflict
  - Does collimator with source helps?
  - Will be investigated by the latest NWU cosmic ray measurement with 3 ladder telescope. This study gives better angular control of trajectory compared to past single+double hit measurement.
- Thick tail of the residual distribution cannot be reproduced by MC
  - Implement accidental hit rates in MC using far side silicon area from the beam spot (Cheng-Wei)
  - Compare with low rate cosmic ray residual distribution.
  - Ultimate rate effect free efficiency evaluation with cosmic ray