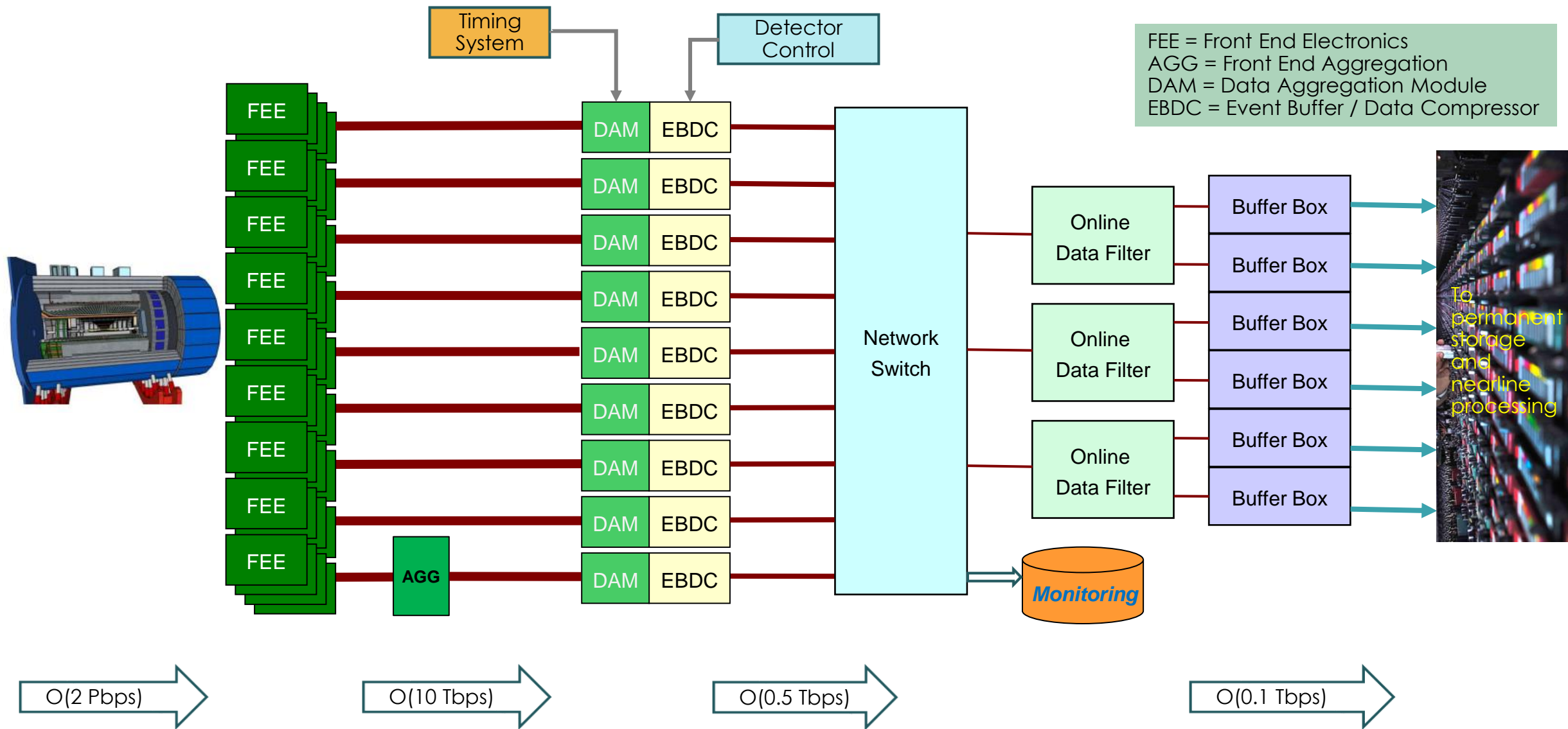


Remind myself to start recording

# Agenda 29 September 2022

- Introduction
- To-Do List Discussions
- AOB

# EPIC Streaming DAQ

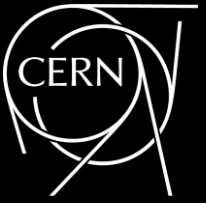


# Timing System

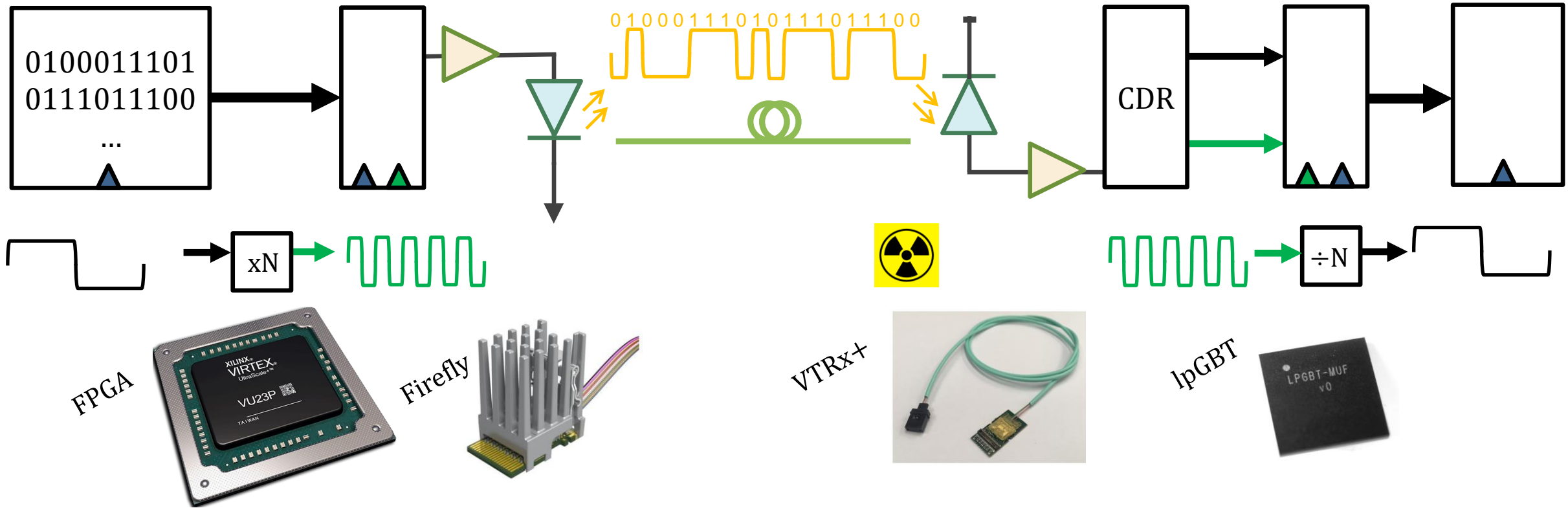
- Subject of the next Streaming Readout Workshop
  - Need to agree on dates and place: 1 day in Nov or Dec; JLAB, SBU, BNL?
- “High Precision Timing Distribution” project at CERN EP-ESE department:
  - <https://ep-ese.web.cern.ch/project/high-precision-timing>
  - Performing target studies to assist experiments in their technical choices
  - Designing common HW, FW, and SW modules optimizing the timing distribution
  - Projects: TTC-PON; TCLink; White Rabbit; ...
- TWEPP talk from E. Mendes from HPTD group:
  - <https://indico.cern.ch/event/1127562/contributions/4914071/> (see following slides)
  - Various talks/posters on timing distribution from LHC experiments

# Self-synchronous link

S. Mendes

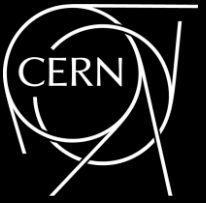


- Example: Versatile Link+ for phase-2 upgrades

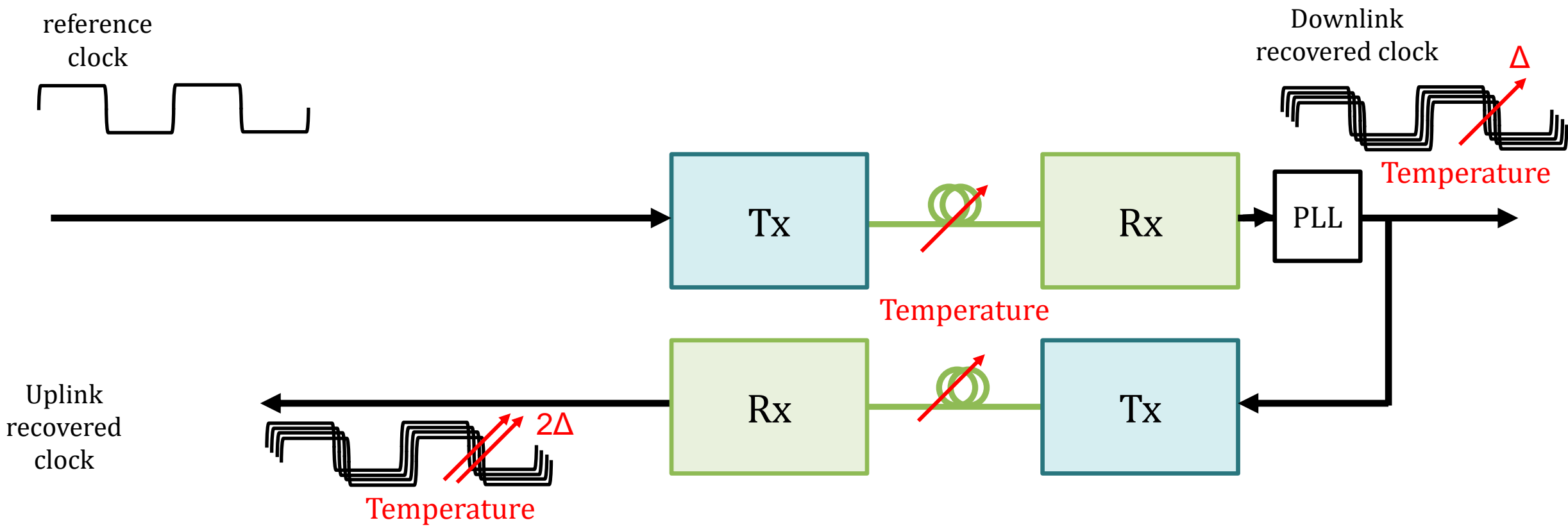


# Bidirectional self-synchronous link

S. Mendes



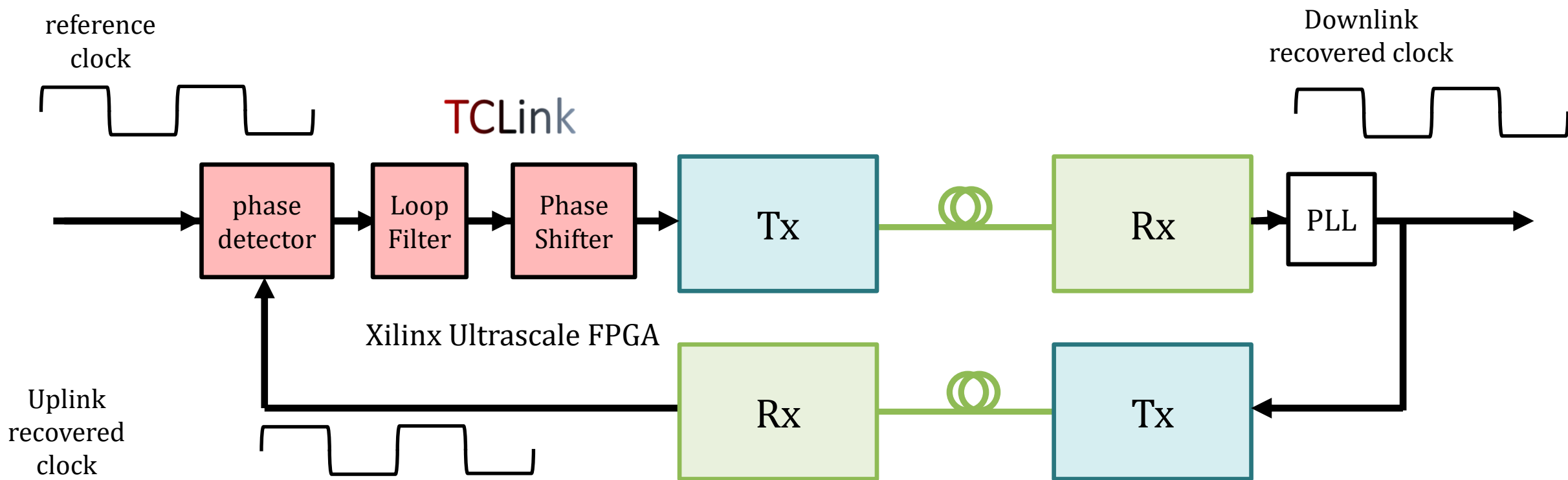
- Temperature variations in fiber change phase of recovered clock



# Timing Compensated Link

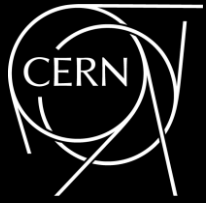
S. Mendes

- TCLK implementation: fully integrated in FPGA

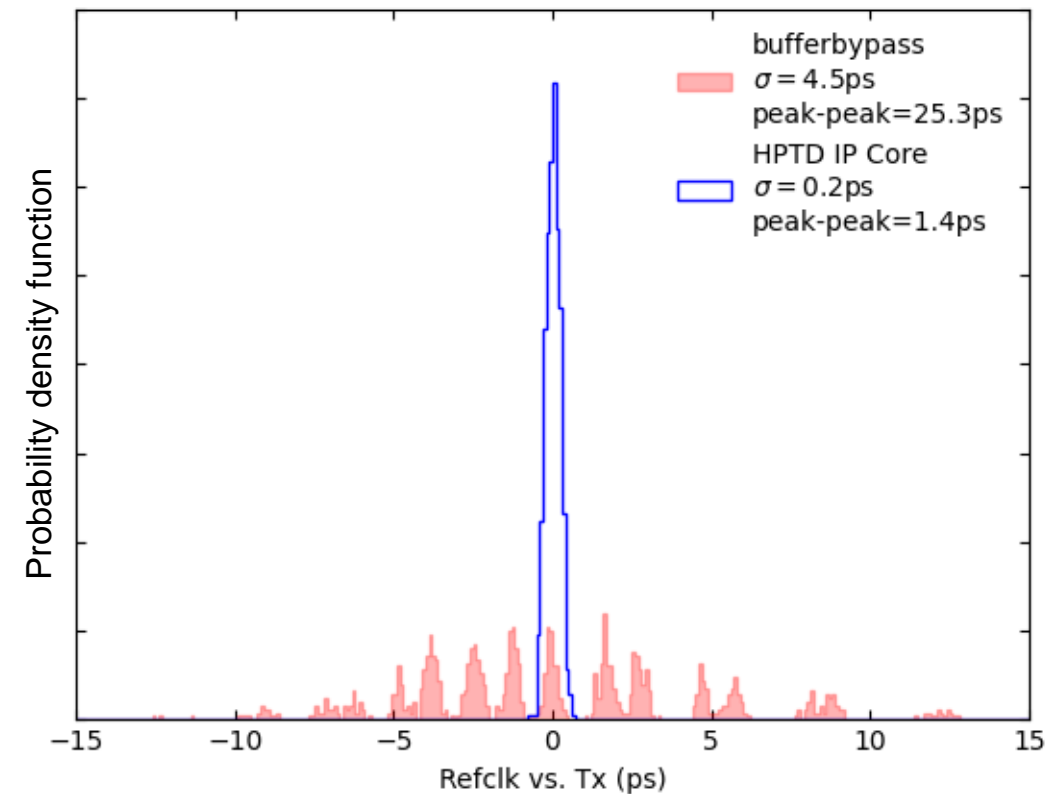
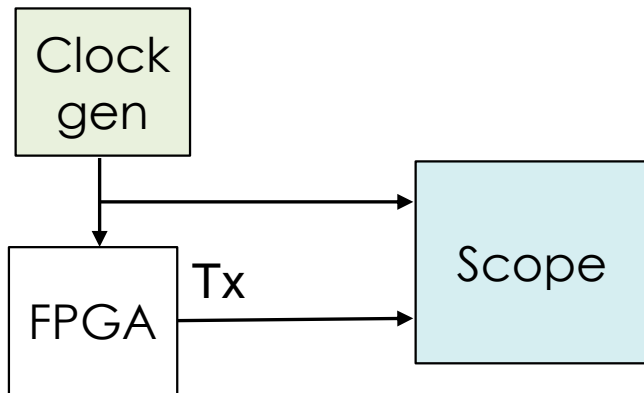


# Calibration-related phase-variations

S. Mendes



- sub-Unit Interval Level
  - Example for Ultrascale Transmitter





AOB ...

# Useful Links

- Mailing list: [eic-projdet-daq-l@lists.bnl.gov](mailto:eic-projdet-daq-l@lists.bnl.gov)
- Indico page: <https://indico.bnl.gov/category/409/>
- Wiki: <https://wiki.bnl.gov/EPIC/index.php/DAQ>
- Mattermost channel: <https://eic.cloud.mattermost.com/main/channels/det1-daq>  
(signup: [https://eic.cloud.mattermost.com/signup\\_user\\_complete/?id=i8gnmob4stdrpjfrezhegxs3ew](https://eic.cloud.mattermost.com/signup_user_complete/?id=i8gnmob4stdrpjfrezhegxs3ew))
- Talks from Streaming Readout Workshop X: <https://indico.jlab.org/event/519/timetable/#all.detailed>
- Live Notes from SRO workshop:  
[https://docs.google.com/document/d/1vFz1Z9c4Ck7eaE\\_eMcJgzg\\_UNUsYwC1OnygzlX95yic/edit#heading=h.175xdrpf8ddv](https://docs.google.com/document/d/1vFz1Z9c4Ck7eaE_eMcJgzg_UNUsYwC1OnygzlX95yic/edit#heading=h.175xdrpf8ddv)
- A summary report for the SRO workshop is here: [https://docs.google.com/document/d/1X6Ms\\_oubcWx-8DUiExMFIJdCC6svWNbWKiz7OQjMCeQ/edit?usp=sharing](https://docs.google.com/document/d/1X6Ms_oubcWx-8DUiExMFIJdCC6svWNbWKiz7OQjMCeQ/edit?usp=sharing)