

# ILC Positron Plan

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# Status

- There has been significant progress in the e-driven scheme
  - Some progress of the target test
  - Cost estimation
    - Cost review meeting at KEK on Sep.26 with LCB, LCC and TCMB
  - Refinement of positron yield simulation and radiation estimation
- On the other hand there is little progress on undulator scheme
  - Ushakov's QWT simulation --- should be confirmed
  - New member Fukuda
  - New idea for the photon dump → Morikawa(Kuriki)
- People to visit Japan (coming fall to winter)
  - Peter, Andriy, Pavel
- Budget in JFY2018 unknown yet
  - For now we can just assume some budget will come

# What is Urgent for Undulator?

- For possible experiment with a small subsector of the wheel being planned in JFY2018, we first need a starting design of the wheel
  - **Cooling calculation**
    - This is the most urgent. Necessary before engineering design.
    - Some preliminary results presented at AWLC-SLAC
    - We need a definite model calculation by LCWS-Strasbourg
  - Ti-Cu contact
  - Magnetic bearing design

# What is Urgent for Undulator? (2)

- Parameters
  - 125GeV beam, 1312 bunches, 7mm thick target
  - QWT calculation
  - Flux concentrator
    - I am quite pessimistic. New design possible?
- Other issues (urgent but not the most urgent in view of manpower)
  - Photon dump
  - Shielding of target region and replacement scenario
- Crisis of undulator scheme
  - Manpower very much limited