Strategy of e-Driven Scheme

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Positron Source Status

- Undulator source
  - Design is mature except the rotating target
  - Various possibilities are being pursued
  - Little hope of R&D completion before ILC approval
  - Probability of success when budget becomes ready is not 100% (and not zero either)
  - Need backup scheme
- e-Driven source
  - Conceptual design exists
  - But design detail must be worked out to be a true backup
  - CFS-related issues are urgent

Survey on Technical Feasibility of ILC

(unofficial translation of 国際リニアコライダー(ILC)計画に関する技術的実現可能性及び加速器製作における技術的課題等に関する調査分析)

- MEXT asked for commissioned survey of the technical feasibility of ILC
  - Hearing at domestic/foreign labs and industries
  - Report deadline Feb.1.2016
- Tender of NRI (Nomura Research Institute) was accepted
  - First meeting will be in July
- Need documents from ILC side
  - Lyn Evans is preparing an outline document
  - Supplementary document needed on positron source
  - Summary on e-Driven source (not described in TDR) by the end of June
    - Slides ~10 pages (the speaker in the meeting will compress them)
    - Urgent but not in detail

Detailed Report on e-Driven Source

- System design of e-driven source
  - Simulation
  - Electron driver linac
  - Target
  - Flux concentrator
  - Capture section
  - Booster linac
  - Energy compressor
  - Tunnel, Radiation safety
  - Cost
- Least advanced is the booster linac

Change Request

- At this moment
  - It is obviously premature to change the baseline
  - But it is necessary to make the backup design ready
  - CFS design is the most urgent
- Possible contents of the change request
  - Make the CFS design compatible with both undulator source and e-driven source
  - For the tunnel design a system design of the e-driven source to somewhat detail is necessary
- Deadline
  - There is no rigorous deadline
  - But hopefully before November workshop
  - Tentatively, deadline for detailed design should be the end of September

Who are Working?

Incomplete list

- Simulation: Seimiya
- Target: T.Omori, T.Takahashi[1)], P.Sievers[4)], M.Yamanaka, RIGAKU[5)], J.Gao[2)], S.Jin[2)]
- Flux concentrator: P.Martyshkin[3)], T.Kamitani, G.Pei[2)], X.Sun[2)]
- Linac: S.Fukuda, S.Michizono, J.Urakawa
- CFS: M.Miyahara
- General: M.Kuriki, T.Okugi, K.Yokoya

1) Hiroshima Univ. 2) IHEP 3) BINP 4) CERN 5) company, other are KEK