Report from TESLA Collaboration Board

Approval of Minutes Adoption of Agenda New members of the Collaboration: MIT David Moncton Status of the XFEL Jochen Schneider Status of the LC Albrecht Wagner Status of TTF Carlo Pagani Technical Board, Naming of TTF and the VUV-FEL Albrecht Wagner

General Discussion

Albrecht Wagner Hamburg, 23 January 2004

Members of the TESLA Collaboration

CANDLE. Yerevan

Yerevan Physics Institute, Yerevan

Institute for High Energy Physics (IHEP), Academia Sinica, Beijing

Tsinghua University, Beijing Peking University



Institute of Physics, Helsinki



CEA/DSM DAPNIA, CE-Saclay, Gif-sur-Yvette

Laboratoire de l'Accélérateur Linéaire (LAL), IN2P3, Orsav

Institut de Physique Nucléaire (IPN), Orsay



Rheinisch-Westfälische Technische Hochschule, Aachen

Berliner Elektronenspeicherring-Gesellschaft für Synchrotronstrahlung, BESSY, Berlin

Hahn-Meitner Institut Berlin

Max-Born-Institut, Berlin

Technische Universität Berlin

Technische Universität Darmstadt

Technische Universität Dresden

Universität Frankfurt

GKSS-Forschungszentrum Geesthacht

Deutsches Elektronen-Synchrotron DESY in der Helmholtz-Gemeinschaft, Hamburg und Zeuthen

Universität Hamburg

Forschungszentrum Karlsruhe

Universität Rostock

Bergische Universität-GH Wuppertal



CCLRC-Daresbury and Rutherford Appleton Laboratory, Cheshire

Royal Holloway, University of London (RHUL) Queen Mary, University of London (QMUL)

University College London (UCL)

University of Oxford



Laboratori Nazionali di Frascati, INFN, Frascati Istituto Nazionale di Fisica Nucleare (INFN), Legnaro

Istituto Nazionale di Fisica Nucleare (INFN), Milan

Istituto Nazionale di Fisica Nucleare (INFN), Rome II

Sincrotrone Trieste



University of Mining and Metallurgy, Cracow

Soltan Institute for Nuclear Studies. Otwock-Swierk

High Pressure Research Center. Polish Academy of Science, Warsaw

Institute of Physics, Polish Academy of Science, Warsaw

Polish Atomic Energy Agency, Warsaw

Faculty of Physics, University of Warsaw

Moscow Engineering and Physics Institute, Moscow

Institute for Theoretical and Experimental Physics (ITEP), Moscow

Budker Institute for Nuclear Physics (BINP), Novosibirsk

Budker Institute for Nuclear Physics (BINP), Protvino

Institute for High Energy Physics (IHEP), Protvino

Institute for Nuclear Research (INR) Russian Academy of Sciences, Troitsk









Argonne National Laboratory (ANL), Argonne IL

Fermi National Accelerator Laboratory (FNAL), Batavia IL

Massachusetts Institute of Technology (MIT), Cambridge MA

Cornell University, Ithaca NJ

University of California, Los Angeles CA

Jefferson Lab, Newport News VA

Joint Institute for Nuclear Research (JINR), Dubna

Welcome MIT

fs synchronisation of multiple laser

Synchronisation of RF microwave and laser signal

Short wavelength laser seed generation

RF power generation and control

Photo injector performance study

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European Design Study

• Within the accelerator subgroup of ELCSG the preparation of a design study within FP6 has started, with input from CERN and the European members of the TESLA collaboration.

• As the technology choice will not be made before the submission (March 2004), the study addresses those issues which are technology independent



Joint co-ordination by CERN and DESY (rotating), admin. contact to be appointed

DESY coord: Nick W.

Meeting this afternoon

WG of ILCSC, chaired by S. Ozaki, is preparing a design organisation to move the global project forward as soon as the technology choice has been made.

Discussion about structure and tasks are well advanced

Task:

Establish internationally agreed design, defining the basic layout of facility and subsystems.

Complete technical design document incl. costing etc.

First presentation to ILCSC in February

Draft, 21 January 2004 (with input from Hasan, Hans and Helen)

At present (January 2004), before the formation of the XFEL Laboratory and its own advisory boards and before the technology decision for the LC, the TESLA collaboration finds itself in an interim phase. This phase will last for approximately 1 year.

The charge for the TESLA Technical Board during this time will be:

Charge for the TESLA Technical Board

Provide advice to the TESLA Collaboration on technical activities towards reaching the goals of TTF, both for the FEL and the LC work.

Give recommendations /suggestions to the TESLA project leader the TESLA Collaboration Board.

Technical Board

<u>Tasks</u>

Review important objectives, schedules and priorities of upcoming activities at TTF

Provide input to the definition of technical milestones for next 3month intervals

Review TTF progress at 3-month intervals, identifying gaps and possible problems in the TTF program

Provide input to help optimise the LC and FEL objectives

Give summary report to the TESLA Collaboration

Technical Board

Membership

Chair: Should come from outside DESY

Permanent Membership:

- The TESLA Project Leader
- Eight members, including both the LC and FEL activities

Invite experts as needed (as in the past)

Next step: appoint chair (TESLA search committee)

The Naming Question

There exists considerable political pressure to provide a clear name for the laser.

What is the TESLA Test Facility? <u>Two</u> objects:

- 1) The SC RF development and testing infrastructure
- 2) The TTF Linac (phase I and II)

It is the test bed for the SC Linear Collider development, the test bed for the SASE FEL development, and the driver for the VUV-FEL

In addition, we have the VUV-FEL (including the TTF linac, undulators, photon diagnostics, experiments)

The Use of the Facility

Proposed names:

TTF

VUV-FEL

From the user and funding point of view one deals with <u>three</u> goals:

- 1) R&D for SC Linear Colliders
- 2) R&D for the VUV- and X-FEL
- 3) Operation of the VUV-FEL for experiments VUV-FEL

Funding in Germany will be provided in these three programme categories

The distribution of running time between the three goals needs further thinking. It will strongly depend on the technology decision.

ITRP Visit of TESLA

Proposed date for visit of ITRP to DESY is 5/6 April 2004

Need to prepare strategy, talks, posters:

I propose a poster presentation as for German Science Council and suggest to form a task force for the preparation of the visit

Chair: Dieter Trines

Key issues:

- Overall technical status and readiness for construction, meeting the criteria of the parameter group
- Status of R1 and R2
- Operation experimence in SC RF accelerators world-wide
- Industrial involvement in mass production, cost estimates
- Cost
- Opportunities for wolrd labs to play major role.

Next TESLA Meeting

Proposed date for visit of ITRP to DESY is 5/6 April 2004 This will hopefully mean that many of you will be present

Therefore it is suggested to hold the next meeting on

6 - 8 April 2004 at DESY.

This is the week preceeding Eastern