TESLA Project
Superconducting Linear Accelerator

TESLA

Press Information

Deutsches Elektronen-Synchrotron
Member of the Helmholtz Association
Press and Information Office
Petra Folkerts, Ute Wilhelmsen
Tel. (040) 8998-3616 (-4597)
Fax (040) 8998-4307
presse@desy.de

Hamburg, July 15, 2002

Excellent Marks for the International Accelerator Project TESLA

Positive statement of the German Science Council about the linear collider for particle physics and the X-ray laser laboratory at DESY

On Monday, July 15 2002, at 11 a.m., the German Science Council, installed by the German government, published its evaluation statement about large scale facilities for basic research in the natural sciences. It assessed the TESLA project planned by the research center DESY in cooperation with international partners to be worth of support under the following conditions: to detail the project proposal for the superconducting electron-positron linear collider TESLA with respect to international funding and cooperation, and to present a revised technical project proposal for the TESLA X-ray laser version with a separate linear accelerator. In its statement, the Science Council stresses that the international TESLA collaboration plays a worldwide leading role in the research and development of superconducting accelerators and that the technical project proposal for TESLA has reached a high degree of maturity.

Development work for the TESLA project – which is to be realized in Hamburg and the region of Pinneberg (Schleswig Holstein) – is currently being carried out within a large international collaboration upon the initiative and under the leadership of DESY. Meanwhile, 45 institutes from 11 countries are involved in developing and testing the innovative TESLA technology at a test facility at DESY. The results obtained so far in the development of the superconducting accelerator technology and the X-ray laser are milestones that have been

Printable pictures and background information:
www.desy.de/press

DESY
Notkestraße 85
22607 Hamburg, Germany

acknowledged all over the world.

The Science Council especially welcomed the intention to realize the linear collider as an international project – an intention which is expected to bring about a fundamentally new and trend-setting quality of worldwide collaboration in science. The research perspectives with TESLA were estimated to be extremely promising. According to the Science Council, the linear collider is expected to provide answers to fundamental open questions in elementary particle physics which will lead to an extensive gain of knowledge in the realms of the micro- and macrocosm. Concerning the X-ray laser, whose extremely intense and short light pulses will open up completely new possibilities for investigations in fields like materials research and molecular biology, the Science Council declared its technological characteristics and research program being unique in Europe. The X-ray laser is expected to have an enormous influence on both basic and application-oriented research.

“DESY takes note of the statement of the Science Council with great pleasure and understands it as an encouragement to proceed with the current developments,” said Prof. Albrecht Wagner, chairman of the DESY directorate. “This includes the upgrade of the TESLA test facility planned for 2003, the continuation of the preparations of the ‘Planfeststellungsverfahren’ (procedure of the official approval of a plan) as well as concretizing the European and worldwide cooperation.” The successful development of the international TESLA project would have been inconceivable without the dedicated and competent collaboration of the partners from all over the world.

TESLA stands for TeV-Energy Superconducting Linear Accelerator – a particle accelerator facility operating at teraelectronvolt energies which is being developed in an international collaboration. TESLA comprises a 33-kilometer-long linear accelerator bringing electrons into collision with their antiparticles, the positrons, and an X-ray laser laboratory. The special feature of the new facility: The novel superconducting accelerators allow collisions between particles of the highest energies and serve as a source of intense and extremely short X-ray flashes with laser properties. The TESLA X-ray lasers will offer new perspectives for research in different disciplines – from physics and chemistry to biology, materials research and medicine. TESLA is to be established and operated as an international center.