Minutes of the 285th Session of the

DESY Scientific Committee (WA)

on 13 August 2019

Participants:

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Directorate: H. Dosch, W. Leemans, F. Lehner

Guests: R. Bühler (AP), C. Wunderer (FS-DS)

Works Council: ---

Minutes: I. Melzer-Pellmann, I.M. Gregor

Agenda:

TOP 1: Approval of the agenda
TOP 2: Report from the directorate
TOP 3: The ULTRASAT Project
TOP 4: WA Election Rules
TOP 5: Co-opting External Members
TOP 6: Formation of Commission for Scientific Misconduct
TOP 7: Report from the WA Working Groups
TOP 8: AOB

TOP 1. Approval of the agenda

The proposed agenda is accepted without changes.

TOP 2. Report from the Directorate

Helmut Dosch reported from the recent developments at DESY. One of the main current problems is the expected increase of the DESY base budget in the order of only 2-3%. This is below the typical increase of costs at DESY and thus we have to look very carefully into the future plans. Already

approved projects, especially with international participation, will not be affected. He also mentioned that part of the problem also stems from the ministry decision to support ELI (Extreme Light Infrastructures) with 10 MEUR per year without telling Helmholtz. In addition, he is still fighting against more funding of from DESY to run XFEL operation costs – a standing issue between DESY and Helmholtz/BMBF.

The DDL (Distributed Detector Lab) formerly run in Karlsruhe was now taken over by Ties Behnke. Also, the Helmholtz Imaging Platform (HIP) is now coming to live which results in an increase of the base budget by 1.1 MEUR per year.

Helmut Dosch further summarized the DESY2030 plans with the three topics: Matter Research; Accelerator R&D; Advanced Imaging. Here then main innovation is the Kaldera project around Laser Plasma Acceleration introduced by Wim Leemans at the last WA meeting. Furthermore, large funding will be required for Flash 2020 and Petra IV.

A new decision flow was introduced to DESY to follow new projects more closely and to have various decision points: from “critical decision” CD0 (suggestion level) to CD4 (final decision level); for example, is it possible that a project at CD2 level can still be discontinued of if boundary conditions change dramatically. This concept should make the decision process more transparent.

The latest computer simulation of the Science City Bahrenfeld was shown where besides DESY many other local research institutes will have their home base.

In the discussion, the question was raised why the ALPS experiments were not mentioned. The ALPS experiments should now go through the same critical decision process as all other possible new projects at DESY. Furthermore, it was asked if the decision process influence the free research choices that were promised to leading scientists. In principle yes, but has to be somehow in agreement with the direction of the lab.

Concerns about high-rise towers in the new Bahrenfeld campus plan were mentioned as that might cause vibrations into the ground which might be disturbing the science operation on DESY grounds. This will be taken into account and the current plans not carved in stone.

TOP 3. The ULTRASAT Project

Rolf Buehler reported on the status and progress of the ULTRASAT project, a future satellite near-ultraviolet space wide-field telescope for multi-messenger astronomy. This is an international project led by Weizman where DESY will deliver the focal plan array within three years. The plan is to buy BSI-CMOS sensors (UV-sensitivity with delta doping or high-k dielectric coating) and to add readout electronics developed between FS and AP divisions. Please see slides for the details. During the following discussion, questions about the cost and risks were addressed. The Stiftungsrat recently approved 3.5MEur to fund the project. The fact that this is a completely new territory (equipment shipped to space) seems to be under control as the equipment to be developed is well known by the involved people and they have strong partners who are experienced with outer space detectors. The system cannot be used at FLASH as a much lower readout rate is require for ULTRASAT.

TOP 4. WA Election Rules

DESY V1 is preparing for the next WA election which is taking place every second year. According to § 2 „Voting rights and eligibility“ of the WA rules of procedure the following people have voting rights: “DESY employees who have a university degree, a technical college degree or a comparable degree and who have worked as a scientific or technical employee or a comparable occupation for at least six months are entitled and eligible to vote for the election of scientific employees. Members of the board of directors and leading scientists are neither entitled to vote nor to be elected.”

Andrea Schuster and Riccardo Lami summarised the problematics of the definition of who is eligible to vote during WA elections. After some discussions, it was suggested to remove “comparable degree” or add “natural sciences degree” - comparable degree is necessary for some people (if comparable is meant for degrees outside Germany). Natural sciences should not be used, e.g. PhD in US is usually Doctor in Philosophy.

TOP 5. Co-opting External Members

As more external institutes are now on the DESY campus, it was discussed which of the new institutes should be asked to send a representative. According to the election rules of the WA, each university and non-university institution with permanent working groups of at least 15 scientists on campus should have one representative. Based on this we should add representatives from CSSB and Max-Planck.

TOP 6. Formation of Commission for Scientific Misconduct

A task force was formed to follow the work of the commission of scientific misconduct.

TOP 7. Report from the WA Working Groups

1. Campus Development:

A working group, led by Stephan Haid, was formed to deal with the challenge of access management on the DESY campus in the context of the Science City Bahrenfeld (SCB). On first sight it appears that the open-campus approach for the SCB does not go along with the character of the DESY campus being a scientific work site (Betriebsgelände) with particular demands for security, safety, and stable working conditions. It is the task of the working group to come up with a proposal for future access management on the DESY campus in the spirit of ‘as open as possible, as safe as necessary’. Currently, the working group interfaces with the UHH to learn about their ideas and approaches to this problem with the goal to formulate an approach that is compatible with the requirements of all parties on campus.

2. Career Development:

The directorate initiated a working group who is addressing possible career paths for DESY employees to make DESY more attractive as an employer. The WA will be represented by a few members from the various departments to make sure that all aspects also from the scientific side are included. Nele Müller, Nicoleta Baboi and Ingrid Maria Gregor are following these developments. First meetings were taking place and a skeleton of the new concepts will hopefully be presented at the next WA meeting.