



# Status of the European Strategy Update

<https://europeanstrategygroup.web.cern.ch/EuropeanStrategyGroup/>

RECFA meeting at PSI

Villigen, Switzerland, 19-20 July 2012

T. Nakada

EPFL-LPHE

Lausanne, Switzerland

Scientific Secretary for Strategy Session of CERN Council



# Since the beginning of this year

- Preparation toward the European Strategy for Particle Physics updates by the European Strategy Group:
- Working in two ways
  - **Scientific inputs by the Preparatory Group**
    - Soliciting written inputs from the community and policy makers
    - Open Symposium in Cracow, 10-12 September 2012 in Cracow
    - Briefing book summarising the scientific status
  - **Discussion on other issues by the working group of ESG**
    - Organisational structure on how to follow and implement the strategy
    - How to cope with the global project
    - Relation with the external world
    - Education, outreach and communication
    - Knowledge and technology transfer, relation with industry

# Preparation for the Open Symposium

- **Open Symposium, Cracow 10-12, September 2012**  
<http://espp2012.ifj.edu.pl/>
  - Open for registration
    - **deadline for registration 15 August**
  - Programme, Speakers, Session Conveners, and Session Scientific Secretaries defined.
  - Starting at 9:00 on 10 September, ending at 14:00 on 12 September with lunch. Ample time for discussion
  - Subjects are:  
High Energy Frontiers, Precision Tests, Strong Interactions, Astroparticle, Neutrino, Accelerators, Infrastructure and Computing, Theory, Other Regions
  - **Deadline of written inputs to be considered by the plenary speakers, 31 July**

# Monday, 10 September 2012

09:00 - 10:30

## Opening

Convener: T. Nakada

09:00 **Introduction and Scope of the Meeting 30'**

09:30 **Overview Talk 45'**

Speaker: Antonio Masiero (INFN)

10:15 **Discussion 15'**

10:30 - 11:00

## Coffee

11:00 - 12:35

## Physics at High Energy Frontier and Flavour Physics (I)

Convener: Y. Kuno, R. Forty (Scientific Secretary)

11:00 **HEF Experiment Results 35'**

*30' + 5' discussion*

Speaker: Guenther Dissertori (ETH Zuerich)

11:35 **Flavour and Symmetries; Experiment Results 35'**

*30' + 5' discussion*

Speaker: Frederic Teubert (CERN)

12:10 **Charged Lepton Flavor and Symmetry Physics Implications 25'**

*20' + 5' discussion*

Speaker: Gino Isidori (Istituto Nazionale Fisica Nucleare (IT))

12:35 - 14:00

## Lunch

14:00 - 16:30

## Physics at High Energy Frontier and Flavour Physics (I)

Convener: K. Desch, M. Diemoz, A. Lister (Scientific Secretary)

14:00 **Implications on Possible New Physics from Direct and Indirect Measurements 35'**

Speaker: Christophe Grojean (CERN)

14:35 **Next Step Facilities 40'**

Speaker: Terry Wyatt (University of Manchester (GB))

15:15 **Discussion 1h15'**

16:30 - 17:00

Coffee

17:00 - 18:30

## Strong Interaction Physics

Convener: P. Braun-Munzinger, K. Kutak (Scientific Secretary)

17:00 **Strong Interactions and QCD at the High Energy Frontier 30'**

Speaker: Paul Newman (University of Birmingham (GB))

17:30 **Relativistic Heavy Ion Collisions 20'**

Speaker: Harald Appelshaeuser (Johann-Wolfgang-Goethe Univ.)

17:50 **Discussion 40'**

Tuesday, 11 September 2012

09:00 - 10:20

**Astroparticle Physics, Gravitation and Cosmology**

Convener: C. De Clercq

09:00 **Summary of ApPEC/ASPERA Road-Map 25'**

Speaker: Christian Spiering (DESY)

09:25 **Summary of Activities in Regions Beyond Europe 25'**

Speaker: Michael Turner (tbc)

09:50 **Discussion 30'**

10:20 - 10:50

Coffee

10:50 - 13:00

**Physics of Neutrinos**

Convener: D. Wark

10:50 **Phenomenology of Neutrino Oscillations and Current Situation 15'**

Speaker: Pilar Hernandez (University of Valencia)

11:05 **Next Generation Accelerator Neutrino Projects - Long and Short Baseline 25'**

Speaker: Marco Zito (IRFU-Centre d'Etudes de Saclay)

11:30 **Longer-term Accelerator and Future Reactor Neutrino Projects 20'**

Speaker: Caren HAGNER (Hamburg University)

11:50 **Discussion 50'**

12:40 **Neutrino Mass Measurements 10'**

Speaker: Hamish Robertson

12:50 **Discussion 10'**

13:00 - 14:30

Lunch

14:30 - 16:30

## Accelerator Science and Technology

Convener: R. Aleksan, F. Zimmermann (Scientific Secretary)

14:30 **High Energy 40'**

Speaker: Caterina Biscari (Istituto Nazionale di Fisica Nucleare (INFN))

15:10 **High Intensity 40'**

Speaker: Mats Lindroos (ESS, on leave from CERN)

15:50 **Discussion 40'**

16:30 - 17:00

Coffee

17:00 - 18:30

## Instrumentation, Computing and General Infrastructure

Convener: P. McBride, E. Garutti (Scientific Secretary)

17:00 **Detector R&D for Discovery Science 30'**

*20' + 10' discussion*

Speaker: Ariella Cattai (CERN)

17:30 **Construction of Large Scale Projects - Technical Capabilities and Infrastructure 30'**

*20' + 10' discussion*

Speaker: Jim Virdee (Imperial College Sci., Tech. & Med. (GB))

18:00 **Computing and Data Management for Particle Physics in 2020 30'**

*20' + 10' discussion*

Speaker: Tommaso Boccali (Sezione di Pisa)

## Wednesday, 12 September 2012

09:00 - 10:30

### Particle Physics Theory

Convener: K. Huitu, P. Slavich (Scientific Secretary)

09:00 **The Role of Theory for Particle Physics 30'**

Speaker: Luis Alvarez-Gaume (CERN)

09:30 **Quantum Field Theory on the Lattice 20'**

Speaker: Christine Davies (University of Glasgow)

09:50 **Discussion 40'**

10:30 - 11:00

Coffee

11:00 - 13:00

### Synthesis of All the Sessions

Convener: T. Nakada

11:00 **Americas 30'**

Speaker: Andrew J Lankford (University of California, Irvine)

11:30 **Discussion 10'**

11:40 **Asia Pacific 30'**

Speaker: Prof. Masanori Yamauchi (KEK)

12:10 **Discussion 10'**

12:20 **Closing Discussion 40'**

13:00 - 14:30

Lunch



# Briefing Book

- Synthesis of the Open Symposium, not a priority list
- Chapters are:  
High Energy Frontiers, Precision Tests, Strong Interactions, Astroparticle, Neutrino, Accelerators, Infrastructure and Computing, Theory
- Scientific Secretaries are invited to join the effort
- Compilation of the written inputs is added
- Current timeline
  - Overall Skelton: 5 October
  - Submission deadline for the written input for the briefing book: 15 October
  - First complete draft: 22 October
  - Final draft: 16 November
  - Briefing Book ready for circulation: 7 December

# Strategy Group

- Meeting dates
  - First meeting: 16 March, (9-12:30), CERN
    - introduction
    - ideas on the working groups
  - Second meeting: 19 June (14-17), CERN
    - work plan for the working groups
    - review of the current strategy
  - Third meeting: 12 September (14-18), Cracow
    - reflection on the Open Symposium
    - working group report
  - Fourth meeting: 11 December (14:30-18), CERN
    - preparation for the drafting session
    - working group report
  - Strategy drafting session: 21-26 January 2013, Erice

# Strategy Group

- Working Groups
  - WG-1: Mandate and organisational structure for the Council for the European Strategy and its implementation  
Convener: President of the Council
  - WG-2: Organisational structure for European participation in global projects, including the role and definition of the National Laboratories and the CERN Laboratory in the European Strategy  
Convener: S. de Jong
  - WG-3 Relations with external bodies, in particular EU-related issues  
Convener: B. Asman
  - WG-4: Knowledge and technology transfer, relations with industry  
Convener: E. Augé
  - WG-5: Outreach, communication, and education  
Convener: S. Bethke

# In 2013

- Strategy drafting session by the European Strategy Group in Erice, 21-26 January  
Outcomes
  - Draft Strategy Statements
  - Draft Strategy Deliberation Document
- Discussion and finalisation of the strategy by the Council during the March meeting
  - Strategy Statements
  - Strategy Deliberation Document
  - Brochure for policy makers and wider public
- **Formal adaptation of the European Strategy for Particle Physics at a special Council session in Brussels in May**

In conclusion

Please come to the Open Symposium  
and  
submit your written input!