Frontiers in high-energy particle astrophysics and particle physics

Start: April 18th, 10:30am End: April 19th, 3:30pm Location: Max-Planck-Institut für Kernphysik, Otto-Hahn-Hörsaal Registration: until April 4th via eMail: ruth.crespo@mpi-hd.mpg.de

Preliminary agenda:

Thursday, April 18th (start 10:30):

10:30 - 12:30 The Particle Physics Years - 2 hours

30 minutes for each talk, including questions

- Jets of hadrons (S. Bethke) canceled
- The beauty of Upsilon physics (K. Schubert)
- B physics in hadron collisions: from HERA-B to LHCb (U. Uwer)
- The quest for Majorana neutrinos (S. Schönert)

12:30 - 13:30 Lunch

13:30-15:30 Astroparticle Physics (Part I) – 2 hours

30 minutes for each talk, including questions

- Review talk on Space-based observations (P. Caraveo)
- Review talk on CRs beyond the knee and Auger (K.-H. Kampert)
- Review talk on HE Neutrino searches (U. Katz)
- How to build large telescopes (H. Kärcher)

15:30 - 16:00 Coffee break

16:00 Welcome address (K. Blaum)16:05 Laudatio (H. Völk)16:15 Colloquium: "Where would we be without Cygnus X-3?" (A. Watson)

Reception

Dinner

Friday, April 19th (start 9:30):

9:30-10:20 Astroparticle Physics (Part II) – 50 minutes 25 minutes for each talk, including questions Northern IACTs (J. Holder)
Interpretation of gamma-ray results in the context of multi-frequency observations (S. Wagner)

10:20-10:45 coffee break

10:45-12:30 HEGRA, HESS and CTA (Part I, general overview) –

1 hr 45 min

20 minutes for each talk, including questions:

- The path from CAT to HESS (M. Punch)

- The path from HEGRA to HESS (G. Heinzelmann)
- The success of HESS (G. Fontaine)
- The path from HESS to HESS-II (C. Stegmann)
- The path towards CTA (J. Hinton)

12:30-13:30 Lunch

13:30-15:15 HEGRA, HESS and CTA (Part II, view from within Werner's group) – 1 hour 45 minutes

20 minutes per talk including questions:

- Detectors for astrophysics at the MPIK, from CRT to HESS II (M. Panter)
- Galactic Center and Dark Matter (C. Van Eldik)
- Supernova remnants (D. Berge)
- The Galactic Plane Survey (C. Deil)
- Nuclei and Electrons (R. Bühler)

Concluding Remarks (F. Aharonian)