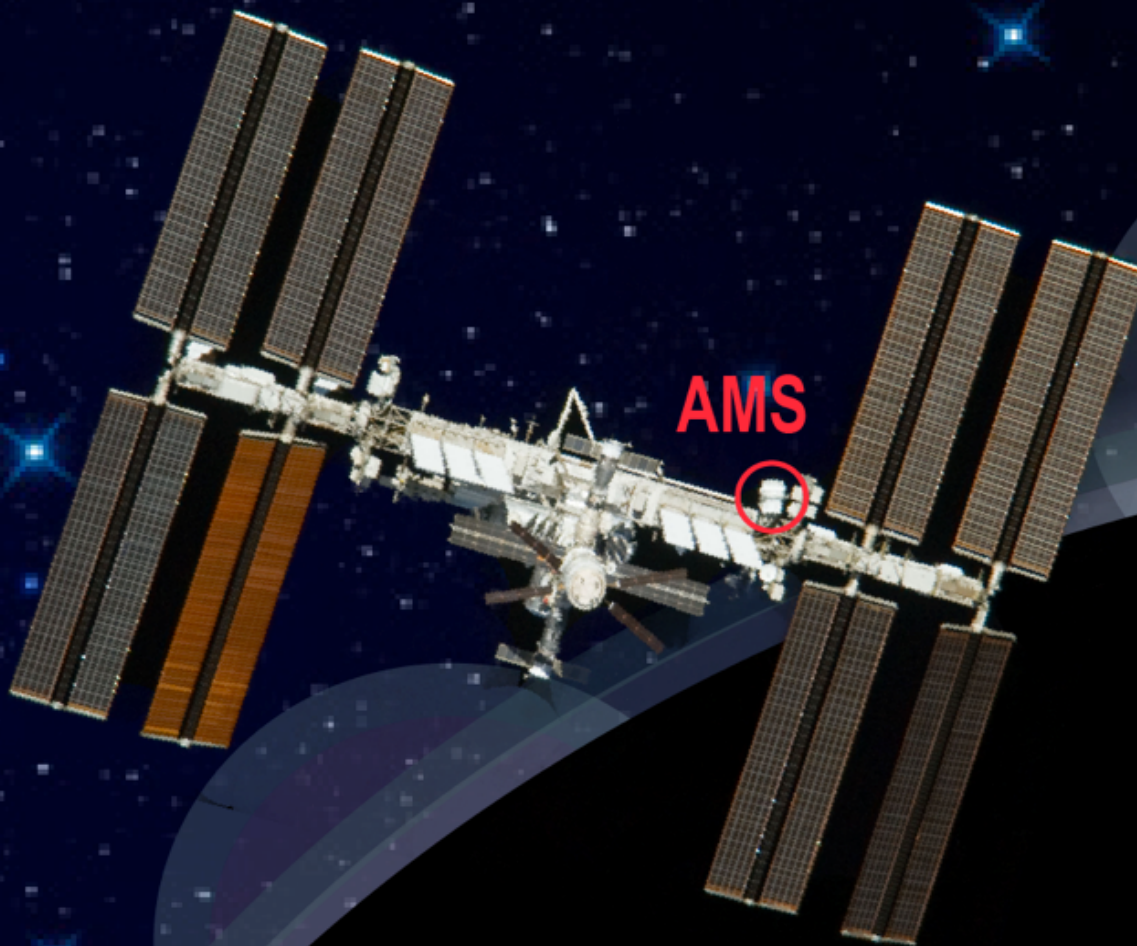


AMS Days at CERN

The Future of Cosmic Ray Physics and Latest Results

CERN, Main Auditorium,
April 15-17, 2015



Speakers:

Roberto BATTISTON, ASI, Trento
Kfir BLUM, IAS, Princeton
John ELLIS, King's College, London, CERN
Jonathan FENG, UC Irvine
William GERSTENMAIER, NASA
John M. GRUNSFELD, NASA
Francis HALZEN, Wisconsin
Werner HOFMANN, MPI Heidelberg
Gordon KANE, Michigan
Peter F. MICHELSON, Stanford
Igor V. MOSKALENKO, Stanford
Angela OLINTO, Chicago
Piergiorgio PICOZZA, INFN, Tor Vergata
Vladimir S. PTUSKIN, IZMIRAN, Moscow
Lisa RANDALL, Harvard
Michael SALAMON, DOE
Subir SARKAR, Oxford, Niels Bohr Inst.
Eun-Suk SEO, Maryland
Tracy SLATYER, MIT
Edward C. STONE, Caltech
Michael TURNER, Chicago
Alan A. WATSON, Leeds
Yue-Liang WU, UCAS/ITP, CAS
Fabio ZWIRNER, Padua, CERN
and
presentations on the AMS latest results

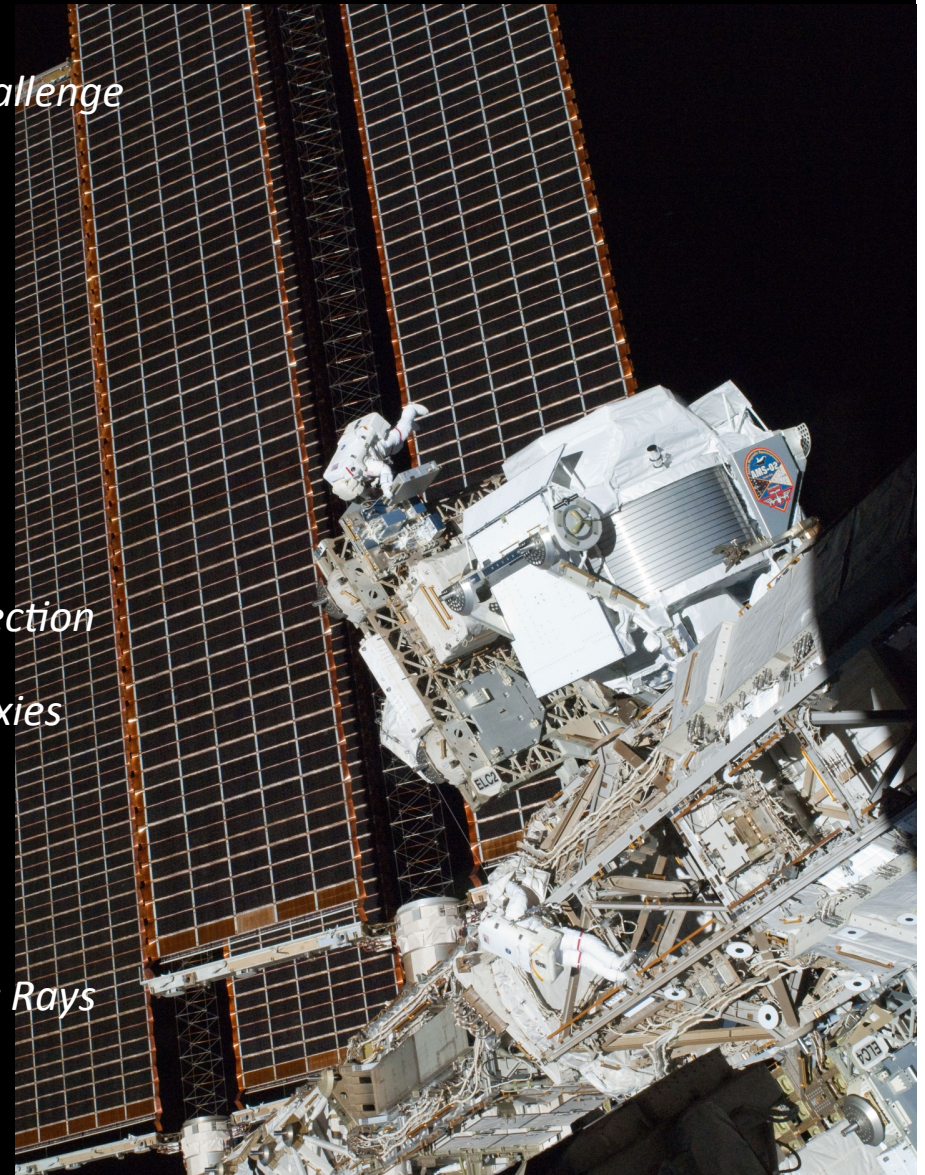
Contact: Ms. Laurence Barrin <laurence.barrin@cern.ch>

AMS Days at CERN

The Future of Cosmic Ray Physics and New Results

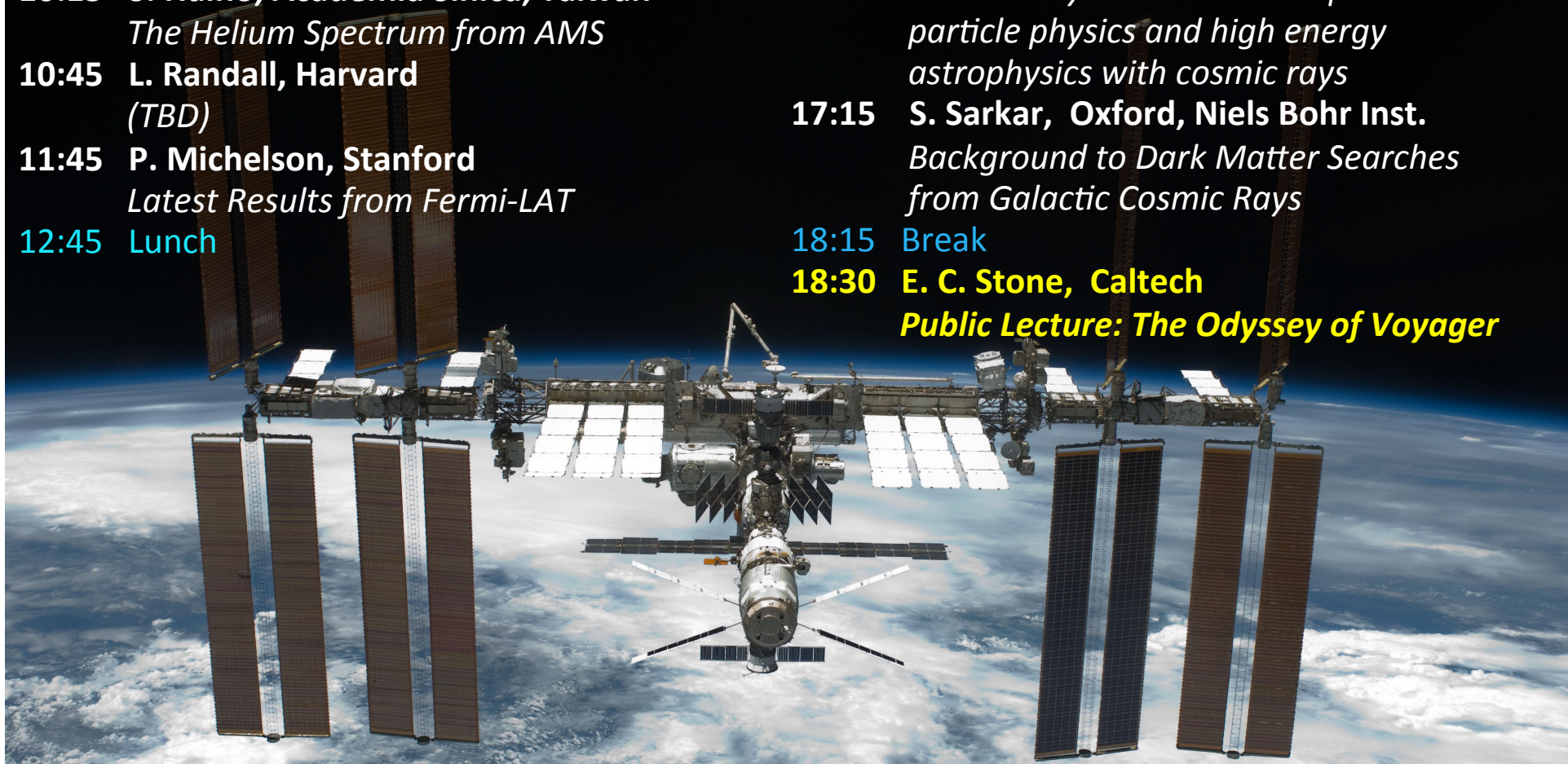
Wednesday, 15 April 2015

- 08:30** R. Heuer, CERN
Welcome
- 09:00** Michael S. Turner, Chicago
Making Cosmology Real: The Dark Matter Challenge
- 10:00** S. Ting, CERN, MIT
Introduction to the AMS Experiment
- 10:45** Break
- 11:00** A. Kounine, MIT
Latest AMS Results: The Positron Fraction and the $p\text{-}\bar{p}$ ratio
- 12:00** Lunch
- 13:00** F. Zwirner, Padova, CERN
New Physics, Dark Matter and the LHC
- 14:00** J. L. Feng, UC Irvine
Complementarity of Indirect Dark Matter Detection
- 15:00** I. V. Moskalenko, Stanford
Cosmic Rays in the Milky Way and Other Galaxies
- 16:00** Break
- 16:15** K. Blum, IAS, Princeton
It's about time: interpreting AMS antimatter data in terms of cosmic ray propagation
- 17:00** V. S. Ptuskin, IZMIRAN
Acceleration and Transport of Galactic Cosmic Rays
- 18:00** Break
- 18:15** W. Gerstenmaier, NASA
Public Lecture: Human Space Exploration



Thursday, 16 April 2015

- | | |
|--|---|
| 08:30 S. Schael, RWTH-Aachen
<i>The e^- Spectrum and e^+ Spectrum from AMS</i> | 14:00 P. Picozza, INFN, Rome Tor Vergata
<i>The JEM-EUSO Program</i> |
| 09:00 B. Bertucci, Perugia
<i>The (e^- plus e^+) Spectrum from AMS</i> | 15:00 F. Halzen, Wisconsin
<i>Latest Results from Ice Cube</i> |
| 09:30 V. Choutko, MIT
<i>The Proton Spectrum from AMS</i> | 16:00 Break |
| 10:00 Break | 16:15 A. Watson, Leeds
<i>Latest Results from the Pierre Auger Observatory and Future Prospects in particle physics and high energy astrophysics with cosmic rays</i> |
| 10:15 S. Haino, Academia Sinica, Taiwan
<i>The Helium Spectrum from AMS</i> | 17:15 S. Sarkar, Oxford, Niels Bohr Inst.
<i>Background to Dark Matter Searches from Galactic Cosmic Rays</i> |
| 10:45 L. Randall, Harvard
(TBD) | 18:15 Break |
| 11:45 P. Michelson, Stanford
<i>Latest Results from Fermi-LAT</i> | 18:30 E. C. Stone, Caltech
<i>Public Lecture: The Odyssey of Voyager</i> |
| 12:45 Lunch | |



Friday, 17 April 2015

- 08:00 T. Slatyer, CTP, MIT**
Scrutinizing Possible Dark Matter Signatures with AMS, Fermi, and Planck
- 08:30 J. R. Ellis, King's College, London, CERN**
Super-symmetric Dark Matter
- 09:30 A. Oliva, CIEMAT**
AMS Results on Light Nuclei - B/C
- 09:45 L. Derome, LPSC, Grenoble**
AMS Results on Light Nuclei - Li
- 10:00 M. Heil, MIT**
AMS Results on Light Nuclei - C/He
- 10:15 Break**
- 10:30 Y. L. Wu, UCAS/ITP, CAS**
Implications of AMS02 Experiment
- 11:15 A. Olinto, Chicago**
The Highest Energy Cosmic Particles
- 12:15 Lunch**
- 13:30 E.-S. Seo, Maryland**
Cosmic Ray Energetics and Mass: From Balloons to the ISS
- 14:30 W. Hofmann, MPI Heidelberg**
Latest Results from HESS and the Progress of CTA
- 15:30 G. Kane, Michigan**
Are there currently well-motivated and phenomenologically allowed dark matter candidates (besides axions)
- 16:30 Break**
- 16:45 J. M. Grunsfeld, NASA**
Science at NASA
- 17:15 M. Salamon, DOE**
The Cosmic Frontier at DOE
- 17:45 R. Battiston, ASI, Trento**
What next in fundamental and particle physics in space ?
- 18:15 S. Ting, MIT, CERN**
Summary

