Cosmic Rays at Mountain Altitude

14-19 September 2010

Sponsored by the Major of Plock

Topics

- Cosmic rays in the stratosphere
- High energy interactions
- Extensive air showers data

Scientific program

- Ballon and satellite experiments
  ATIC, CREME, new Russian experiments
- Accelerator data from LHC
  CMS, ATLAS, ALICE, TOTEM
- Monte Carlo models
  QGSJet, Sibyll
- Unusual cases of interactions
  in cosmic rays,
  CENTAURO, Alignment,
  exotic gamma-hadron families
- Data from PAMIR and other emulsion experiments
- Extensive air showers
  EAS-TOP, GRAPES, GAMMA,
  TIEN-SHAN, BAKSAN

Lectures

Cosmic rays in the stratosphere

1. **M. Panasiuk**, Primary spectrum around the 'knee'
2. **E. Seo**, The CREAM data
3. **L. Jones**, Summary of the ISVHECRI 2010 at Fermilab
4. **A. Erlykin**, A.W. Wolfendale „Do we see an 'iron knee'?
5. **D. Podorozhny**, Russian planned satellite measurements of high energy primary cosmic rays
6. **J. Kempa**, Primary spectrum from Pamir data
7. **A. Borisov**, Gamma - families, hadron interactions and primary
8. **Z. Włodarczyk**, On the chemical composition of cosmic rays of higher energy

High energy interactions

1. **T. Pierog**, High energy interaction model
2. **R. Mukhamedshin**, Shortcomings of the modern interaction models
3. **H. Niewiadomski**, TOTEM at the LHC
4. **E. Gladysz**, Centauro-related phenomena – how to search for them at the LHC?
5. **J. Kempa**, News from LHC
6. **A. Managadze**, Alignment phenomenon at Pamir and stratosphere
7. **A. Borisov**, Exotic gamma-hadron families – a challenge to the Standard Model
8. **J. Malinowski**, The flux of hadrons at Pamir
9. **G. Trinchero**, Cross-section measurements with EAS-TOP experiment

Extensive air showers

1. **S. Gupta**, EAS data from GRAPES experiment
2. **R. Martirosov**, EAS from GAMMA experiment
3. **A. Chiavassa**, EAS-TOP, KASCADE and KASCADE-GRANDE data
4. **M. Tamada**, Gamma rays and hadrons in high-energy air shower cores observed in high-mountain cosmic ray experiments
5. **A. Chubenko**, EAS data from Thien-Shan experiment
6. **J. Kempa**, **R. Martirosow**, Remarks on the Tien-Shan and GAMMA data
7. **A. Kudshaev**, Research for hadron component of EAS with energy E > 20 GeV at high 1700 m above sea level

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