

24th European Cosmic Ray Symposium



September 1 - 5, 2014

Christian-Albrechts-Universität zu Kiel

Germany

6 Programme

Plenary Talks

Lecture Hall: MPH

11:15-12:00	Hudson, H.	Extreme Solar Events in an Historical Perspective
12:00-12:20	Rozanov, E.	Climate-related effects of cosmic rays
12:20-12:40	Kanekal, S.	Particles in the magnetosphere
12:40-13:00	Crosby, N.	Health Issues and Space Weather
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13:00-14:30	Lunch Break	
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14:30-15:05	Bergstrom, L.	WIMP Dark Matter - overview
15:05-15:35	Battiston, R.	DM search with CR satellite
15:35-16:00	Maier, G.	DM searches with gamma rays from ground ground and space
16:00-16:30	Döbrich, B.	Searches for ultralight Dark Matter – axions and the like
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16:30-17:00	Coffee Break	
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17:00-17:25	Boezio, M.	AMS and Pamela: spectra and composition of cosmic rays below the knee
17:25-17:50	Chiavassa, A.	The Knee and beyond: Results from KASCADE-Grande, IceTop and Tunka
17:50-18:15	Ptuskin, V.	The knee and beyond: a theorists view
18:15-18:40	Allard, D.	The transition from galactic to extragalactic cosmic-rays
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19:00-	Welcome Reception	

Plenary Talks

Lecture Hall: MPH

09:00-09:40	Kowalski, M.	Status of High-Energy Neutrino Astronomy
09:40-10:20	Lipari, P.	Understanding high energy neutrinos
10:20-10:45	Desiati, P.	The Astrophysics of Cosmic Ray Anisotropy: a Review.

10:45-11:15	Coffee Break	
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Contributed Talks

Lecture Hall: HGH			Lecture Hall: MPH	
11:15-11:30	Heber, B.	Neutron monitor measurements on the German research vessel Polarstern - First results	Scherer, K.	Cosmic rays in astrospheres
11:30-11:45	Koehler, J.	Measurements of the Charged and Neutral Particle Spectra on the Martian Surface with MSL/RAD	Mori, N.	PAMELA measurements of the boron and carbon spectra
11:45-12:00	Hasebe, N.	Lunar Gamma-Rays and Neutrons Measured by Kaguya Gamma-ray Spectrometer	Erlykin, A.	Vela as the source of cosmic rays responsible for the formation of the knee
12:00-12:15	La Vacca, G.	Statistical limits on isotropic CR distributions with a space detector	Menn, W.	H, He, Li and Be Isotopes in the PAMELA-Experiment
12:15-12:30	Koldobskiy, S.	Deuteron and proton spectra measurements under radiation belt with PAMELA instrument	Rettig, R.	Understanding the anisotropy of cosmic rays in the TeV-PeV energy range
12:30-12:45	Posner, A.	A Mars Year of Forbush Decreases on the Martian Surface	Volkov, N.	Spectrum and fraction of cosmic ray positrons: results of the anomalous diffusion approach
12:45-13:00	Mikhailov, V.	Search for a positron anisotropy with PAMELA experiment		

13:00-14:30	Lunch Break			
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Lecture Hall: HGH			Lecture Hall: MPH		
14:30-14:45	Spanier, F.	Charged particle transport in realistic turbulence	Stozhkov, Y.	Spectra of electrons, protons and alfa-particles according to measurements from the Pamela spectrometer	
14:45-15:00	Petukhova, A.	The Efficiency of Surfing Acceleration of Charged Particles under Space Conditions	De Mitri, I.	Measurement of the all-particle and light-component energy spectra with ARGO-YBJ	
15:00-15:15	Kocharov, L.	Semi-transparent shock model for gradual solar energetic particle events	Di Sciascio, G.	Recent highlights from ARGO-YBJ	
15:15-15:30	Dalla, S.	Drift induced deceleration of Solar Energetic Particles	Kachelriess, M.	Explaining the knee by Cosmic Ray Escape from the Galaxy	
15:30-15:45	Klein, K.	Statistical relationships between SEPs, flares and CMEs: a re-assessment	Thoudam, S.	Cosmic-ray spectral anomaly at GeV-TeV energies	
15:45-16:00	Klassen, A.	STEREO observations of SEP events during approaching superior conjunction	Schoo, S.	The spectrum of cosmic rays in the energy range of 10^{14} - 10^{18} eV	
16:00-16:30			Coffe Break		
16:30-16:45	Dresing, N.	Anisotropy observations of widespread solar energetic electron events with STEREO and ACE	Karelin, A.	The high energy electron spectrum measurements with the PAMELA calorimeter	
16:45-17:00	Laurenza, M.	Temporal evolution of energy spectra during SEP events	Surdo, A.	Study of extensive air shower structure around the axis with ARGO-YBJ	
17:00-17:15	Struminsky, A.	Observations of High Energy Solar Gamma and X-ray Emission and Solar Energetic Particles Events	Thomson, G.	Results from the Telescope Array Experiment	
17:15-17:30	Kuehl, P.	Extended Measurement Capabilities of the Electron Proton Helium INstrument aboard SOHO - Energy Spectra up to 1 GeV and Anisotropies during GLE 71	Buitink, S.	Cosmic ray mass composition measurements with LOFAR	
17:30-17:45	Makhmutov, V.	Analysis of the cosmic ray variations and solar flare activity in October-November 2013	Valiño, I.	Measurements of the muon content of air showers at the Pierre Auger Observatory	
17:45-18:00	Buetikofer, R.	What are the causes for the spread of GLE parameters deduced from NM data?	Alves Batista, R.	Propagation of UHECRs in Cosmic Magnetic Fields-233	
18:00-			Poster Session I (SH1, GEO)		

Plenary Talks

Lecture Hall: MPH

09:00-09:30	Panasyuk, M.	Air shower observations from space with TUS/JEM-EUSO/KLYPVE
09:30-09:55	Tluczykont, M.	Towards gamma-ray astronomy with timing-arrays
09:55-10:20	Rodriguez-Pacheco, J.	Solar Orbiter and its energetic particle instrumentation: EPD
10:20-10:45	Krupp, N.	JUICE: Europe's mission to Jupiter
10:45-11:15	Coffee Break	

Lecture Hall: HGH			Lecture Hall: MPH		
11:15-11:30			Haungs, A.	Physics Goals and Status of JEM-EUSO and its Test Experiments	
11:30-11:45	Papaioannou, A.	A Novel Forecasting System for Solar Particle Events and Flares (FORSPEF)	Bongi, M.	Results from the LHCf experiment	
11:45-12:00	Miroshnichenko, L.	Occurrence rate of SEP events: Recent progress and some constraints	Arteaga-Velazquez, J.	Confronting EPOS-LHC predictions for the muon content of high-energy EAS with the KASCADE-Grande measurements	
12:00-12:30	Bakaldin, A.	Earth's magnetic field as analyzer of the cosmic ray ions charge	Conceicao, R.	The average longitudinal shower profile: exploring the shape information	
12:15-12:30	Herbst, K.	Influence of Ground Level Enhancements on the Terrestrial Production of ^{10}Be , ^{14}C and ^{36}Cl	Keilhauer, B.	A description of the fluorescence emission in air induced by extensive air showers	
12:30-12:45	Usoskin, I.	How severe can be solar particle events: Assessment from cosmogenic radionuclides in lunar rocks	Kostunin, D.	The Tunka Radio Extension: latest analysis results	
12:45-13:00	Yashin, I.	Real-time data of muon hodoscope URAGAN	Dzhatdoev, T.	The cascade model of the VHE anomaly in AGN spectra	
13:00-14:30	Lunch Break				

Lecture Hall: HGH			Lecture Hall: MPH	
14:30-14:45	Blanco, J.	Magnetic cloud properties as observed by Helios mission	Kachelriess, M.	Interpretations of the IceCube excess
14:45-15:00	Wawrzynczak, A.	The connection of the interplanetary magnetic field turbulence and rigidity spectrum of Forbush decrease of the galactic cosmic ray intensity	Barrios-Marti, J.	Searches for Point-like sources using the ANTARES neutrino Telescope
15:00-15:15	Belov, A.	Modeling of the galactic cosmic ray density variations in the magnetic clouds.	Visser, E.	Diffuse flux results from the Antares neutrino telescope
15:15-15:30	Bazilevskaya, G.	Correlation of the quasi-biennial variations in galactic cosmic rays and the solar activity indices	Khokhlov, S.	Investigation of cascade showers in Cherenkov water detector NEVOD
15:30-15:45	Clay, R.	H.E.A.M.S., the Adelaide High Energy Astrophysics Muon System.	Scheriau, F.	Measurement of the Muon Neutrino Spectrum with IceCube
15:45-16:00	Balabin, Y.	Annual variation of cosmic rays in 24th solar cycle	Gleixner, A.	Indirect Search for Dark Matter with the ANTARES Neutrino Telescope
16:00-16:30 Coffe Break				
16:30-16:45	Stozhkov, Y.	Long-term observations of cosmic rays in the Earths atmosphere	Kang, D.	A limit on the diffuse gamma-ray flux measured with KASCADE-Grande
16:45-17:00	Sorokin, V.	Estimations of cosmic ray drift fluxes in galactic cosmic rays	Garzon, J.	Tragaldabas: a new high resolution detector for the regular study of Cosmic Rays
17:00-17:15	Della Torre, G.	Treatment of maximum solar Activity with HelMod Propagation Model	Haungs, A.	The KASCADE Cosmic-ray Data Centre KCDC
17:15-17:30	Gieseler, J.	Spatial gradients of low-GeV GCR protons and alpha particles in the inner heliosphere obtained from PAMELA and Ulysses observations	Schröder, F.	Results of LOPES on the Radio Detection of Air Showers
17:30-17:45	Munini, R.	Solar modulation of GCR electrons over the 23rd solar minimum with PAMELA	Papini, P.	A multi-telescope magnetic facility in space with large acceptance and high MDR
17:45-18:00	Krainev, M.	On the method of the GCR partial intensities related to the main physical processes	Oláh, L.	Close cathode chamber technology for cosmic particle tracking
19:00-20:00	Wimmer-Schweingruber, R. F.	Von der Kieler Förde zum Mars		(in German)

Plenary Talks

Lecture Hall: MPH

09:00-09:45	Vainio, R.	Solar energetic particles from the corona into the heliosphere
09:45-10:05	Gómez-Herrero, R.	The longitudinal distribution of solar energetic particles
10:05-10:25	Giglietto, N.	Fermi observations of long duration gamma ray flares from the Sun
10:25-10:45	Fichtner, H.	Voyager Results from the Heliopause and Their Implications for Cosmic Ray Transport
10:45-11:15 Coffee Break		
11:15-11:45	Becherini, Y.	Active Galactic Nuclei and IACTs
11:45-12:15	Eger, P.	Supernova Remnants and Pulsar Wind Nebulae with IACTs
12:15-12:45	Arteaga-Velazquez, J.	All-sky observations with HAWC: latest results
12:45-14:30 Lunch Break		

Lecture Hall: HGH		Lecture Hall: MPH
14:30-15:00	Hörandel, J.	A new way of air shower detection: measuring the properties of cosmic rays with LOFAR
15:00-15:15	Ricciarini, S.	The CALET experiment for high-energy astroparticle physics on the ISS.
15:15-15:30	Budnev, N.	The Tunka experiment: from cosmic ray to gamma-ray astronomy
15:30-15:45	Porelli, A.	Timing calibration and directional reconstruction for Tunka-HiSCORE
15:45-16:00	Coniglione, R.	The KM3NeT project
16:00-16:30 Coffee Break		
16:30-18:00 Poster Session II (S3 – S8)		

SEP server

19:00

Conference Dinner

Plenary Talks

Lecture Hall: MPH

09:00-09:49	Zas, E.	Beyond the Galaxy: UHECR results from the Pierre Auger Observatory and the Telescope Array
09:40-10:10	Ulrich, R.	LHC data and forward physics at high energies
10:10-10:50	Fukushima, M.	Observation of UHECRs in the next decade.
10:50-11:15		Coffee Break
11:15-11:45		Coffee Break
11:45-13:00		Rappateur Talks
13:00-14:30		Lunch Break
14:30-16:00		Rapporteur Talks
16:00-16:30		Coffee Break
16:30-18:00		Closing Session
18:00-		Splinter

7 Poster

7.1 Solar and heliospheric cosmic rays (SH)

Blanco, J.	CaLMa Neutron Monitor: current status and future improvements	S1-124
García-Población, Ó.	nmPanel: a tool for controlling Neutron Monitor operation and maintenance	S1-125
García-Tejedor, J.	CaLMa simultaneous Muon Telescope and Neutron Monitor proposal	S1-126
Kryakunova, O.	Possible ground level enhancements at the beginning of the maximum of Solar Cycle 24	S1-176
Gerasimova, S.	Tensor anisotropy of cosmic rays	S1-208
Catalán, E.	Ground level enhancements and their solar counterpart	S1-214
Abunina, M.	Phase distribution of the first harmonic of the cosmic ray anisotropy during the initial phase of Forbush effects	S1-253
Vogt, A.	Modulation of Jovian MeV-electrons by Corotating Interaction Regions	S1-281
Kecskemety, K.	Periodic variations of Jovian electron fluxes at SOHO and STEREO	S1-306
Kecskemety, K.	Quiet-time suprathermal ion abundances in slow and fast solar wind	S1-307
Storini, M.	Cosmic ray intensity for about five solar cycles	S1-345
Alania, M.	27-day variations of GCR intensity and anisotropy based on corrected and uncorrected for geomagnetic disturbances data of neutron monitors	S1-354
Krainev, M.	On the GCR intensity and SW and HMF characteristics in and outside the HMF sector structure zone	S1-364
Gil, A.	Spatial topological structure of magnetic field lines creating during alpha-omega transformation in the quasi-periodic variations of galactic cosmic rays	S1-372
Barbashina, N.	Local anisotropy of muon flux during FD according to URAGAN data	S1-383
Heber, B.	Forbush decreases associated to Stealth CME	S1-393
Zelina, P.	Multi-spacecraft observations of heavy-ion solar energetic particles	S1-394
Alania, M.	Maxwell induction equation and the 3-4 Carrington Rotation Period cycling of the 27-day variation of the galactic cosmic ray intensity	S1-397
Modzelewska, R.	27-day variation of the 3D anisotropy of cosmic rays: 1965-2013	S1-399
Alania, M.	Cloudless days and nights and 2D model of the galactic cosmic ray intensity variations	S1-400
Lukovnikova, A.	Modern status of cosmic ray stations ISTP SB RAS	S1-404
Kryakunova, O.	Sporadic and recurrent Forbush-effects in deep solar minimum	S1-409
Kulkarni, S.	Electron-Proton and High Energy Telescopes of EPD for Solar Orbiter	S1-416
Russu, A.	A year of operation of Melibea e-Callisto Solar Radio Telescope	S1-437
Sreckovic, V.	Comparative study of solar events with ground based CR and VLF stations	S1-438
Protopopov, G.	Solar particle events contribution in the space radiation exposure on electronic equipments	S1-440
Wawrzynczak, A.	A stochastic method of solution of the Parker transport equation	S1-443
Paouris, E.	The Solar Polar Field on the cosmic-ray intensity modulation	S1-448
Mavromichalaki, H.	Recent Research Applications at the Athens Neutron Monitor Station	S1-457
Siluszyk, M.	On relation of the long period variations of galactic cosmic ray intensity interplanetary magnetic field turbulence	S1-458
Iskra, K.	Rigidity spectrum of the long-period variations of the galactic cosmic ray intensity in different epochs of solar activity	S1-463

Hidalgo Moreno, M.	Magnetic clouds disturbances on solar energetic particles spectra	S1-504
Uchaikin, V.	Compound model of CR-diffusion: a fractional approach	S1-557
Plainaki, C.	The importance of ground-based data in deriving the properties of relativistic SEPs	S1-568

7.2 CRs at Earth and planets (GEO)

Erlykin, A.	Solar effects on Galactic Cosmic Rays and Terrestrial temperatures	S2-154
Malakhov, V.	Dynamics of lower boundary of proton radiation belt with PAMELA and ARINA experiments during 2006 – 2014 year.	S2-164
Balabin, Y.	Upgrading of Apatity Neutron Monitor	S2-209
Balabin, Y.	Multiplicity with little M and seasonal variation	S2-210
Lidvansky , A.	Data on cosmic ray variations during thunderstorms: Indication to existence of a slow large-scale atmospheric discharge	S2-215
Khaerdinov, M.	Correlations of cosmic ray particle events during thunderstorms with geomagnetic pulsations	S2-250
Parnahaj, I.	Magnetospheric transmissivity for cosmic rays during selected recent events with interplanetary/geomagnetic disturbances	S2-263
Appel, J.	Detecting upward-directed charged particle fluxes in MSL/RAD	S2-335
Aleksandrin, S.	Energy and time characteristics of high-energy electron bursts in near-Earth space	S2-341
Dmitrieva, A.	Temperature effect correction for URAGAN based on CAO, GDAS, NOAA data	S2-391
Balabin, Y.	Fine structure of multiplicity in neutron monitor and differences between small and large multiplicities	S2-414
Balabin, Y.	Gamma-ray increase, atmosphere conditions and secondary cosmic rays	S2-472
Herbst, K.	Magnetopause and Bow Shock Crossings: What can be learned from CHANDRA measurements	S2-487
Artamonov, A.	The neutron monitor network: A tool to detect solar neutrons	S2-511
Mishev, A.	Neutron Monitor Yield Functions: Revisited approach	S2-512
Scharrenberg, E.	Long-term measurements with the Phoswich Instrument for Neutrons and Gammas - Secondary Neutrons and the variation of terrestrial radiation	S2-523
Maghrabi, A.	The Temperature Effect on Cosmic-Ray Intensity as observed at Mid latitude City	S2-549
Dumbovic, M.	Forbush decrease prediction based on the remote solar observations	S2-553
Ehresmann, B.	Radiation measurements during the cruise to and on the surface of mars with MSL/RAD	S2-556

7.3 High energy cosmic rays (HE-CR I)

Garzon, J.	Analysis of Cosmic Rays with the HADES tRPC wall	S4-227
Ptuskin, V.	Interpretation of Voyager 1 data on low energy cosmic rays in galactic wind model	S4-289
Petrukhin, A.	Are the primary cosmic ray and EAS spectra the same or not?	S4-386
Dzhatdoev, T.	Event-by-event study of CR composition with reflected Cherenkov light	S4-421

Epimakhov, S.	Energy determination with the HiSCORE-9 array	S4-425
Stanca, D.	First experimental results of WILLI-EAS detection system	S4-484
Marquardt, J.	GEANT 4 simulation of the Helios cosmic ray telescope E6	S4-490
Fleischhack, H.	A template method for measuring the iron spectrum in cosmic rays with Cherenkov telescopes	S4-514
Benjamin, D.	Secondary to Primary Ratios of Nuclei Below $z=30$ in a Dynamic Spiral-Armed Cosmic Ray Model	S4-550
Nierstenhoefer, N.	Galactic Propagation of Cosmic Rays from Individual Supernova Remnants	S4-560

7.4 (Ultra) High energy cosmic rays (HE-CR II)

Knurenko, S.	Mass Composition of Cosmic Rays at Ultra High Energies by Yakutsk Data	S5-135
Petrov, I.	Radio Signal Correlation at 32 MHz With Extensive Air Showers Parameters	S5-136
Knurenko, S.	Optic Detectors Calibration for Measuring Ultra High Energy Extensive Air Showers Cherenkov Radiation by 532 nm Laser	S5-137
Knurenko, S.	Atmospheric Circulation Influence During Winter on Measurements at Yakutsk Array	S5-139
Falk, S.	Atmospheric Influence on Space-Based Observation of High-Energy Cosmic Rays	S5-240
Ptuskin, V.	On the determination of source spectrum of ultra high energy cosmic rays	S5-292
Daniel, B.	Current status of the AMIGA extension of the Pierre Auger Observatory	S5-312
Kokoulin, R.	Measurements of the energy deposit of inclined muon bundles in CWD NEVOD	S5-358
Volkov, N.	Spectra of protons and nuclei in the energy range $10^{10} \div 10^{20}$ eV in framework of the galactic cosmic ray origin	S5-496

7.5 High energy muons and neutrinos (MN)

Sánchez Losa, A.	Last results of the ANTARES neutrino telescope	S6-173
Jokovic, D.	Pressure and temperature correction of atmospheric muon data	S6-202
Veselinovic, N.	Muon measurements at Belgrade shallow underground laboratory	S6-237
Börner, M.	Methods for the model independent analysis of the Muon Neutrino Energy Spectrum within IceCube	S6-418
Schatz, G.	Neutrinos from SN 1987a	S6-552
Spiering, C.	The Global Neutrino Network	S6-554
Spiering, C.	The GVD neutrino project in Lake Baikal	S6-555

7.6 High energy gamma-rays (GR)

SinitSYna, V.	Very high energy gamma-emission of Perseus Cluster	S7-114
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Sinitsyna, V.	Long-term studies of the Cygnus Region and its objects	S7-115
Sinitsyna, V.	SHALON observations of Active Galactic Nuclei at red shift from $z=0.0179$ to $z=1.375$	S7-116
Kunnas, M.	Simulation of the Tunka Area International Gamma-ray Advanced experiment (TAIGA)	S7-401

7.7 Future Instrumentation in cosmic ray research (INS)

Dorosti Hasankiadeh, Q.	Radio detection of air showers at the Pierre Auger Observatory	S8-1000
Maghrabi, A.	Preliminary Results from A Small Cosmic Ray Detector	S8-174
Kozhin, V.	DAQ and synchronization system for Tunka-HiSCORE array on the base of DRS-4	S8-234
Elftmann, R.	Characterization of an LSO scintillator for space applications	S8-275
Philippov, M.	Development of the ground-based compact neutron detector	S8-340
Kindin, V.	Quasispherical module of Cherenkov water detector NEVOD	S8-422
Yashin, I.	EAS array of the NEVOD Experimental Complex	S8-426
Zadeba, E.	Large-scale drift chamber detector for registration of near-horizontal muons	S8-446
Hiller, R.	The Amplitude Calibration of the Tunka Radio Extension (Tunka-Rex)	S8-455