

## **Session Program**

**29 July 2015 to 6 August 2015**



# ICRC

**The Astroparticle Physics Conference**

34<sup>th</sup> International Cosmic Ray Conference

July 30 - August 6, 2015

The Hague, The Netherlands

## **ICRC2015**

### ***Poster 1 CR***

World Forum  
Churchillplein 10 2517 JW Den Haag The Netherlands

# Thursday 30 July

15:30

## Poster 1 CR

**Poster Session** | **Location:** World Forum, Amazon Foyer, Churchillplein 10 2517 JW Den Haag The Netherlands

### Measurement of the average electromagnetic longitudinal shower profile at the Pierre Auger Observatory

**Speaker**

Francisco Diogo

### On the correlation of the angular and lateral distributions of electrons after multiple scattering allowing for energy losses

**Speaker**

Prof. Maria Giller

### PROTON AND LIGHT ION INTERACTIONS IN COSMIC RAY EXPERIMENT "STRATOSPHERE" IN COMPARISON WITH RECENT COLLIDER RESULTS

**Speaker**

Yernar Tautayev

### Simulations for CALET Energy Calibration Confirmed Using CERN-SPS Beam Tests

**Speaker**

Yosui Akaïke

### A Look at the Cosmic Ray Anisotropy with the Nonlocal Relativistic Transport Approach

**Speaker**

Dr Renat Sibatov

### A Novel CubeSat-Sized Antiproton Detector for Space Applications

**Speaker**

Mr Thomas Pöschl

### A branching model for hadronic air showers

**Speaker**

Vladimir Novotny

### Muon Array with RPCs for Tagging Air showers (MARTA)

**Speaker**

Raul Sarmiento

### High $p_{\mathrm{T}}$ muons from cosmic ray air showers in IceCube

**Speaker**

Mr Dennis Soldin

### The Influence of Magnetic Fields on UHECR Propagation from Virgo A

**Speaker**

Oleh Kobzar

### Zenithal dependence of muon intensity

**Speaker**

Ms Monica Nunes

**A new version of the event generator Sibyll****Speaker**

Ralph Richard Engel

**Status and Prospects of the Auger Engineering Radio Array****Speaker**

Mr Johannes Schulz

**Energy Spectrum and Mass Composition of Ultra-High Energy Cosmic Rays Measured with the Telescope Array Fluorescence Detector Using a Monocular Analysis****Speaker**

Toshihiro FUJII

**Measurement of the water-Cherenkov detector response to inclined muons using an RPC hodoscope****Speaker**

Mr Pedro Assis

**Neutrons produced by the Earth's crust due to Lunar and Solar tides****Speaker**

Dr Nikolay Volodichev

**The Cosmic Ray Nuclear Composition Measurement Performance of the Non-Imaging CHERENKOV Array (NICHE)****Speaker**

John Krizmanic

**The study on the potential of muon measurements on the determination of the cosmic ray composition using a new fast simulation technique****Speaker**

Mario Pimenta

**MEASUREMENT OF THE ISOTOPIC COMPOSITION OF HYDROGEN AND HELIUM NUCLEI IN COSMIC RAYS WITH THE PAMELA-EXPERIMENT****Speaker**

Wolfgang Menn

**The lunar Askaryan technique: a technical roadmap****Speaker**

Justin Bray

**Search for isotropic microwave radiation from electron beam in the atmosphere****Speaker**

Prof. Tokonatsu Yamamoto

**Calibration of the LOFAR antennas****Speaker**

Jörg Hörandel

## **A method for reconstructing the muon lateral distribution with an array of segmented counters with time resolution**

### **Speaker**

Brian Wundheiler

## **Development of the Waseda CALET Operations Center (WCOC) for Scientific Operations of CALET**

### **Speaker**

Yoichi Asaoka

## **Investigation of angular distributions in the interaction of cosmic-ray particles with a dense target and comparison with data of the Large Hadron Collider.**

### **Speaker**

Yernar Tautayev

## **Inelastic and diffractive cross section measurements with the CMS experiment**

### **Speaker**

Colin Baus

## **LHAASO-WFCTA Optical System Optimization for High Precision Cherenkov Shower Reconstruction**

### **Speaker**

Dr Chong Wang

## **The NICHE Array: status and plans**

### **Speaker**

Douglas Bergman

## **Predicted CALET Measurements of Heavy and Ultra-Heavy Cosmic Ray Nuclei**

### **Speaker**

Dr Brian Flint Rauch

## **Performance and Operational Status of Muon Detectors in the Telescope Array Experiment**

### **Speaker**

Toshiyuki Nonaka

## **Seasonal variations in the intensity of muon bundles detected at the ground level**

### **Speaker**

Prof. Rostislav Kokoulin

## **Measuring the Muon Production Depth in Cosmic Ray Air Showers with IceTop**

### **Speaker**

Hershal Pandya

## **An IceTop Module for the IceCube MasterClass**

### **Speaker**

Dr Hans Peter Dembinski

## **In-flight operations and status of the AMS-02 silicon tracker**

### **Speaker**

Xiaoting Qin

## **The Guane Array of the LAGO Project**

**Speaker**

Christian Sarmiento-Cano

**Study of UHECR Composition Using Telescope Array's Middle Drum Detector and Surface Array in Hybrid Mode****Speaker**

Mr Jon Paul Lundquist

**Azimuthal asymmetry in the Cherenkov radiation of EAS****Speaker**

Mr Jorge Cotzomi

**Cosmic Ray Shower Profile Track Finding for Telescope Array Fluorescence Detectors****Speaker**

Mr Jon Paul Lundquist

**Cascade showers initiated by muons in the Cherenkov water detector NEVOD****Speaker**

Prof. Rostislav Kokoulin

**New upper limit on strange quark matter flux with the PAMELA space experiment****Speaker**

Marco Ricci

**Energy Spectrum and Mass Composition of Ultra-High Energy Cosmic Rays Measured by the hybrid technique in Telescope Array****Speakers**

Daisuke Ikeda, Dr William Hanlon

**Telescope Array measurement of UHECR composition from stereoscopic fluorescence detection****Speakers**

Dr Thomas Stroman, Dr Yuichiro Tameda

**PAMELA'S MEASUREMENT OF GEOMAGNETICALLY TRAPPED AND ALBEDO PROTONS****Speaker**

Dr Alessandro Bruno

**CALET measurements with cosmic nuclei: expected performances of tracking and charge identification****Speaker**

Paolo Brogi

**Anisotropy search in the Ultra High Energy Cosmic Ray Spectrum in the Northern Hemisphere using the Telescope Array surface detector****Speaker**

Dr Toshiyuki Nonaka

**Measuring the energy of cosmic-ray helium with the TRD of AMS-02****Speaker**

Andreas Obermeier

## **PAMELA'S MEASUREMENT OF GEOMAGNETIC CUTOFF VARIATIONS DURING SOLAR ENERGETIC PARTICLE EVENTS**

### **Speaker**

Dr Alessandro Bruno

## **Lightning Detection at the Pierre Auger Observatory**

### **Speaker**

Karl-Heinz Kampert

## **Development of a high efficient PMT Winston-cone system for fluorescence measurement of extensive air showers**

### **Speaker**

Karl-Heinz Kampert

## **The north-south asymmetry change during solar magnetic field reversal measured by PAMELA.**

### **Speaker**

Dr Alexander Karelin

## **Calibration of a fluorescence detector using a flying standard light source for the Telescope Array observatory**

### **Speaker**

Mr Motoki Hayashi

## **Understanding the anisotropy of cosmic rays at TeV and PeV energies**

### **Speaker**

Martin Pohl

## **Development of a High Altitude LAGO Site in Peru**

### **Speaker**

Stephany Vargas

## **Local density spectra of electron and muon EAS components in primary energy range from $10^{14}$ to $10^{18}$ eV**

### **Speaker**

Mr Mikhail Amelchakov

## **Development of the TALE Surface Detector Array**

### **Speaker**

Shoichi Ogio

## **Effects of Turbulent Magnetic Fields in Cosmic Ray Anisotropy**

### **Speaker**

Paolo Desiati

## **Search for Ultra-relativistic Magnetic Monopoles with the Pierre Auger Observatory**

### **Speaker**

TOSHIHIRO FUJII

## **Modelling muon and neutron fluxes and spectra on the Earth's ground induced by primary cosmic rays**

**Speaker**

Blahoslav Pastirčák

**The multi-sources M. C. collision generator GHOST for C R simulations at LHC energies****Speaker**

Jean-Noël CAPDEVIELLE

**AugerNext: R&D studies at the Pierre Auger Observatory for a next generation ground-based ultra-high energy cosmic ray experiment****Speaker**

Andreas Haungs

**The TUS orbital detector simulation****Speaker**

Dr Leonid Tkachev

**CALET perspectives for calorimetric measurements of high energy electrons based on beam test results****Speaker**

Gabriele Bigongiari

**Atmospheric monitoring at the Pierre Auger Observatory using the upgraded Central Laser Facility****Speaker**

carlos medina-hernandez

**Parallelization schemes for AIRES's Monte Carlo****Speaker**

Leonardo Dominguez

**Experimental method to measure the positron and electron fluxes in AMS-02****Speaker**

Sami Caroff

**Diffusion and Anisotropy of Cosmic Rays in the Galaxy: Beyond the Dipole****Speaker**

Olivier Deligny

**Automated procedures for the Fluorescence Detector calibration at the Pierre Auger Observatory****Speaker**

Gaetano Salina

**Transition radiation at radio frequencies from ultra-high energy neutrino-induced showers.****Speaker**

Pavel Motloch

**Astrophysical expectations for the variation of the UHECR composition across the sky****Speaker**

Simon Bacholle

**FAMOUS - A fluorescence telescope using SiPMs****Speaker**

Thomas Bretz

**Investigation of the flux of albedo muons with NEVOD-DECOR experimental complex****Speaker**

Dr Semen Khokhlov

**Time asymmetries in the Surface Detector signals of the Pierre Auger Observatory.****Speaker**

Ignacio Minaya

**Taiwan Astroparticle Radiowave Observatory for Geo-synchrotron Emissions (TAROGÉ)****Speaker**

Prof. Jiwoo Nam

**The Sites of the Latin American Giant Observatory****Speaker**

Dr Alberto Carramiñana Alonso

**Search for UHE Photons with the Telescope Array Hybrid Detector****Speaker**

Katsuya Yamazaki

**LHAASO-KM2A PMT test****Speaker**

Sun Zhandong

**LARGE-SCALE ANISOTROPY OF TeV-BAND COSMIC RAYS****Speaker**

Rahul Kumar

**The AMIGA Muon Counters of the Pierre Auger Observatory: Performance and Studies of the Lateral Distribution Function****Speaker**

Dr Brian Wundheiler

**Search for energy dependent patterns in the arrival directions of cosmic rays at the Pierre Auger Observatory****Speaker**

Dr Tobias Winchen

**Measuring cosmic ray ions fluxes with AMS-02****Speaker**

Dr Tesaro Diego

**The effect of geomagnetic field on radio signal patterns from cosmic ray air showers****Speaker**

Mr Mohammad Sabouhi



## **ENERGY THRESHOLD DETERMINATION FOR AMIGA MUON COUNTERS VIA GEANT4 SIMULATION**

### **Speaker**

Mr Luiz Augusto Stuari Pereira

## **Modelling the Production of Cosmogenic Radionuclides due to Galactic and Solar Cosmic Rays**

### **Speaker**

Konstantin Herbst

## **Initial results of a direct comparison between the Surface Detectors of the Pierre Auger Observatory and of the Telescope Array**

### **Speaker**

Ryuji Takeishi

## **Calibration and sensitivity of large water-Cherenkov Detectors at the Sierra Negra site of LAGO**

### **Speaker**

Dr Alberto Carramiñana Alonso

## **Calibration of the TA Fluorescence Detectors with Electron Light Source**

### **Speaker**

Bokkyun Shin

## **CORSIKA modification for rigidity dependent primary selection based on Geomagnetic cutoff rigidity for GRAPES-3 simulations**

### **Speaker**

Mr Hari Haran Balakrishnan

## **Results from the Telescope Array from data collected in hybrid-trigger mode**

### **Speaker**

Hisao Tokuno

## **Meteorological effects of muon component at the mountain muon detectors.**

### **Speaker**

Lev Pustilnik

## **Calibration of the absolute amplitude scale of the Tunka Radio Extension (Tunka-Rex)**

### **Speaker**

Roman Hiller

## **Improving the universality reconstruction using independent measurements of water-Cherenkov detectors and additional muon counters**

### **Speaker**

Markus Roth

## **NuMoon: Status of ultra high energy particle searches with LOFAR**

### **Speaker**

Sander ter Veen

## **New electronics for the surface detectors of the Pierre Auger Observatory**

**Speaker**

James Beatty

**Testing for uniformity of UHECR arrival directions****Speaker**

Anatoly Ivanov

**ELLIPTIC FLOW in nuclear interaction of astroparticle at energy  $10^{16}$  eV.****Speaker**

OLEG DALKAROV

**Heavy ion beam test at CERN-SPS with the CALET Structure Thermal Model****Speaker**

Tadahisa Tamura

**Cosmic-ray positron measurements: on the origin of the  $e^+$  excess and limits on magnetar birthrate****Speaker**

Catia Grimaldi

**New software package of modelling of cosmic rays transport in the atmosphere****Speaker**

yury Balabin

**Education, Outreach and Public Relations of the Pierre Auger Observatory****Speaker**

Dr Charles Timmermans

**The distribution of shower longitudinal profile widths as measured by Telescope Array in stereo mode****Speaker**

Douglas Bergman

**Data Accessibility, Reproducibility and Trustworthiness with LAGO Data Repositories****Speaker**

Dennis Cazar Ramírez

**Ultra-High Energy Air Shower Simulation without Thinning in CORSIKA****Speaker**

Dr Tanguy Pierog

**Studying Cosmic Ray Composition with IceTop using Muon and Electromagnetic Lateral Distributions****Speaker**

Javier Gonzalez

**Investigation of the energy deposit of inclined muon bundles in the Cherenkov water detector NEVOD****Speaker**

Prof. Igor Yashin

**R&D of EAS radio detection in China**

**Speaker**

Dr Zhaoyang Feng

**Nuclei charge measurement with AMS-02 Silicon Tracker****Speaker**

Mrs Stefania Vitillo

**The muon detector prototype AMD for the determination of the muon content in UHECRs****Speaker**

Christine Peters

**Sidereal anisotropy of Galactic cosmic ray observed by the Tibet Air Shower experiment and the IceCube experiment****Speaker**

Prof. Kazuoki Munakata

16:30