12th Workshop on Radiation Monitoring for the International Space Station

10-12 September 2007
Oklahoma State University

Chairman       Günther Reitz, DLR
Co-Chairs      Stephen McKeever, OSU
               Eduardo Yukihara, OSU
               Eric Benton, OSU
12th Workshop on Radiation Monitoring for the International Space Station (WRMISS-12)

Monday, 10 September 2007

8:00 – 8:30 Registration, Breakfast
8:30 – 10:00 Scientific Session
10:00 – 10:45 Break
10:45 – 12:15 Scientific Session
12:15 – 13:45 Lunch
13:45 – 15:15 Scientific Session
15:15 – 16:00 Break
16:00 – 17:30 Scientific Session

Stephen McKeever Welcome
Günther Reitz Introduction/Actions of last meeting

Session: Models

Cary Zeitlin Fragmentation Measurements for GCR Transport
John Wilson Environmental Models and Validation of Engineering Designs
Razvan Gaza Radiation Protection Strategy for the Orion/CEV Program: A Contractor’s Perspective
Myung-Hee Y. Kim Minimizing Astronauts’ Risk from Space Radiation during Future Lunar Missions

Session: Recent Measurements I

Ramona Gaza Recent Shuttle and ISS Radiation Measurements: STS-121, STS-115, STS-116, STS-117 and ISS Expedition 13
Filip Vanhavere Dosimetry of Biological Experiments in Space (DOBIES) with Luminescence (OSL and TL) at the SCK-CEN
Aiko Nagamatsu Space Radiation Dosimetry by PADLES in the ISS Russian Segment to Evaluate the Effect of Crew-Cabin Shielding (ALT-CRISS Project Phase 1 and 2)
Tamas Pázmándi TL dose measurements on board the Russian segment of the ISS by the “Pille” system during Expedition-13 and -14
Dazhuang Zhou High LET Radiation Measured for STS-116 with CR-39 PNTDs
Edward Semones  Tissue Equivalent Proportional Counter Measurements During Recent Shuttle flights and ISS Expedition 15
Kerry Lee  Charged Particle Directional Spectrometer CPDS Measurements of the December 2006 SPEs
Tsvetan Dachev  New Results for the Earth Radiation Environment
Livio Narici  ALTEA Status and Perspectives
Cary Zeitlin  Measurements of the Radiation Environment in Mars Orbit
Yukio Uchihori, Nakahiro Yasuda, Eric Benton, & Thomas Berger  Status of the ICCHIBAN Project

Tuesday, 11 September 2007

8:00 – 8:30  Breakfast
8:30 – 10:00  Scientific Session
10:00 – 10:45  Break
10:45 – 12:15  Scientific Session
12:15 – 13:45  Lunch
13:45 – 15:45  Scientific Session
15:45 – 17:15  Tour of Venture I Laboratories, Refreshments
18:00 – 19:00  Reception OSU Alumni Center

Session: Recent Measurements II

Thomas Berger  MATROSHKA 2A – Preliminary DLR Results
Pawel Bilski  Preliminary TLD results of the MATROSHKA-2A Experiment
Julianna Szabo  Evaluation of the Track Etch Detector Stacks Exposed Inside and on the MATROSHKA Phantom. Phase IIA, 2005-2006
Dazhuang Zhou  Radiation Measured for Matroshka-2 with Different Passive Dosimeters
Thomas Berger  The MATROSHKA Experiment – Data Intercomparison
Soenke Burmeister  The Silicon Scintillator Devices (SSDs) Inside the MATROSHKA Phantom
Slava Shurshakov  Study of Dose Distribution in a Human Body in Space Flight with the Spherical Tissue-Equivalent Phantom

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Session: New Techniques, Instrumentation, and Programs I

Lawrence Pinsky  Update on the Status of the Development of an Active Space Radiation Dosimeter Based on the Medipix-Technology

James J. Connell  Measuring Space Radiation with the Angle Detecting Inclined Sensor (ADIS) Method

Erik Johnson, Christopher Stapels  Tissue Equivalent Radiation Dosimeter on a Chip

Attila Hirn  Space Dosimetry with a 3D Silicon Detector Telescope – the ISS Versions of TriTel

Wednesday, 12 September 2007

8:00 – 8:30  Breakfast
8:30 – 10:00  Scientific Session
10:00 – 10:45  Break
10:45 – 12:15  Scientific Session
12:15 – 13:45  Lunch
13: 45 – 15:15  Scientific Session
15:15 – 16:00  Break
16:00 – 17:30  Scientific Session and Conclusion
18:30 – 20:00  Reception at Dr. McKeever's home

Session: New Techniques, Instrumentation, and Programs II

Richard Maurer  Combined Ion and Neutron Spectrometer for Space Applications (CINS)

Don Hassler  The Radiation Assessment Detector (RAD) for the Mars Science Laboratory: Applicability for Satisfying Current and Future Needs of NASA Space Radiation Monitoring

Luke Hager  Using the HPA PADC Dosemeter for Measurements of Neutron Dose on ISS

Carl Johnson  Advances in the Analysis of CR-39 PNTD using Atomic Force Microscopy

Mark Akselrod  Fluorescent Nuclear Track Detectors – A New Technology for LET Spectroscopy of Heavy Charged Particles in Space Dosimetry
Eric Benton  Tissue Equivalent Detectors for Space Crew Dosimetry and Characterization of the Space Radiation Environment

Günther Reitz  Future European Dosimetry Activities using COLUMBUS

Aiko Nagamatsu  Future activities of PADLES dosimetry in JEM docked with ISS

Satoshi Kodaira  Observation Program of Ultra Heavy Nuclei in Galactic Cosmic Rays

Vernon Jones  Polar Balloon Flights: Opportunities for Space Radiation Studies

Round Table Discussion