



# 23<sup>rd</sup> WRMISS 2018 Conference Program

4-6 September 2018

Research Institute of Nuclear Engineering  
University of Fukui, Tsuruga, Japan

**Co-organized by:**

- Research Institute of Nuclear Engineering, University of Fukui
- National Institute of Radiological Sciences (NIRS) / QST

**Supported by:**

- Fukui Convention & Visitors Bureau
- Tsuruga City

**Chairman of the workshop:**

**Dr. Günther Reitz**

**Prof. Soochow University, Suzhou, China**

**Director CRREAT Project, Nuclear Physics Institute, Czech Republic**

**Consultant German Aerospace Center, Aerospace Medicine, Radiobiology Department, Germany**

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**Workshop Secretariat:**

**Dr. Nakahiro Yasuda**

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## 23<sup>rd</sup> WRIMSS Conference Program: Tuesday 4<sup>th</sup> September 2018

09.00 – 09.15	Welcome (by G. Reitz, N. Yasuda and T. Fuchikami, Town Major)
09.15 – 09:55	Invited Talk I
09:55 – 10:35	Invited Talk II
10:35 – 11:15	Coffee/Tea Break
11.15 – 13:00	Scientific Session 1
13:00 – 15:00	Lunch and Kehi Shrine
15.00 – 16:15	Scientific Session 2
16:15 – 17:00	Coffee/Tea Break
17:00 – 18.15	Scientific Session 3

<b>Guenther Reitz, Nakahiro Yasuda</b>	Welcome and Organisational Issues
<b>Takanobu Fuchikami, Major of Tsuruga</b>	Welcome

### Invited Talk I

<b>Tatsuo Torii</b>	Radiation monitoring for decontamination and decommissioning after the Fukushima Daiichi Nuclear Power Station accident
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### Invited Talk II

<b>Kunihiro Morishima</b>	Muon Radiography in the Egyptian Pyramids
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### Scientific Session 1

<b>Achid Machrafi</b>	Response of Space Bubble Detectors to Heavy Charged Particles
<b>Quazi Muhammad Rashed Nizam</b>	High accuracy scattering angle measurement and topological branching of carbon fragment using CR-39 on both sides imaging technique
<b>Iva Ambrožová</b>	Comparison of three different types of particle-track detectors
<b>Marianthi Fragopoulou</b>	A innovative neutron dosimeter

### Scientific Session 2

<b>Chen Baowei</b>	Plan of Advanced technology research of cosmic radiation dose measurement based on altitude condition
<b>Attila Hirn</b>	Pille Measurements on ISS (April 2017 – February 2018)
<b>Olga Gorokhova</b>	Pille-ISS modernized sensors for EVA and radiation measurements in ISS compartments

### Scientific Session 3

<b>Rositza Koleva</b>	Unified web-based database with Liulin type instruments' cosmic radiation data
<b>Livio Narici</b>	ERFNet, a network for ground work in radiation mitigation to support deep space exploration.
<b>Martina Giraudo</b>	ERFNet, consultation of scientists and technologists for needs and requirements

## 22nd WRIMSS Conference Program: Wednesday 5th September 2018

08.30 - 09.10	Invited Talk III
09.10 - 10.30	Scientific Session 4
10.30 - 11.15	Coffee/Tea Break
11.15 - 13.00	Scientific Session 5
13.00 - 15.00	Lunch + City bus
15.00 - 16.30	Scientific Session 6
16.30 - 17.00	Coffee/Tea Break
17.00 - 18.30	Scientific Session 7
19.30 - 22.30	Conference Dinner: TBD

### Invited Talk III

<b>Harufumi Tsuchiya</b>	Recent status of the GROWTH experiment – Gamma-ray observations at the coastal area of Japan Sea
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### Scientific Session 4

<b>Raisa Tolochek</b>	Radiation Protection Properties of additional Shielding containing Hydrogen Materials installed in Crew Cabin of Russian Segment of ISS
<b>Eric Benton</b>	Assessment of Radiation Shielding Properties of Novel and Baseline Materials External to ISS
<b>Christopher Light</b>	AMS Low Energy Cosmic Rays

### Scientific Session 5

<b>Martin Smith</b>	Bubble-Detector Measurements for Matroshka-R and Radi-N2: ISS-51/52 and ISS-53/54
<b>Ramona Gaza</b>	Passive Radiation Dosimeters Transition to Active Radiation Instrumentation for ISS Operations
<b>Thomas Berger</b>	DOSIS & DOSIS 3D onboard the ISS – Status and Science Overview from 2009 - 2018

### Scientific Session 6

<b>Cary Zeitlin</b>	Results from ISS-RAD
<b>Eric Benton</b>	Active Tissue Equivalent Dosimeter (ATED): a tissue equivalent proportional counter currently operating aboard ISS
<b>Ryan Rios</b>	Timepix Utilization on ISS

### Scientific Session 7

<b>Aki Goto</b>	Dose Calculation inside Kibo Using PHITS and ISS 3D-CAD Geometry
<b>Soenke Burmeister</b>	The DOSIS 3D Project on-board the International Space Station – Analysis of the Solar Particle Event in September 2017
<b>Daniel Matthiä</b>	The solar particle event on 10-13 September 2017 – Spectral reconstruction and calculation of the radiation exposure in aviation and space

## 22<sup>nd</sup> WRMIS Conference Program: Thursday 6<sup>th</sup> September 2018

08:30 – 10:30	Scientific Session 8
10:30 – 11:15	Coffee/Tea Break
11.15 – 12:45	Scientific Session 9
12.45 – 13.30	Lunch
13.30 – 15:15	Scientific Session 10
15:30 – 18.30	Exkursion (Five Lakes)

Adjourn

### Scientific Session 8

<b>Tatsu Sato</b>	Real-Time Estimation of Astronaut Doses During Large Solar Particle Events Based on WASAVIES
<b>Satoshi Kodaira</b>	Contribution to dose in healthy tissue from secondary target fragments in therapeutic proton, He and C beams measured with CR-39 plastic nuclear track detectors
<b>Cary Zeitlin</b>	Latest Updates from the MSL-RAD Experiment
<b>Victor Benghin</b>	Radiation measurements with Liulin-MO dosimeter of FRENDO instrument aboard ExoMars Trace Gas Orbiter during cruise to Mars and in Mars orbit

### Scientific Session 9

<b>Rositza Koleva</b>	First results for the radiation environment on Mars orbit measured by Liulin-MO dosimeter aboard Trace Gas Orbiter
<b>Krasimir Krastev</b>	Quantitative estimates of the main dosimetric quantities based on the LIULIN - MO - ExoMars measurements
<b>Livio Narici</b>	LIDAL: status of the project
<b>Larry Pinsky</b>	Update on the Next Generation Timepix, The Timepix2

### Scientific Session 10

<b>Ulrich Straube</b>	Future Experiments: ESA Active Dosimeter (EAD) on the NASA ORION EM-1 Mission
<b>Razvan Gaza</b>	MARE International Payload aboard Orion EM-1: Status Update for 23rd WRMIS
<b>Stuart, George</b>	Update on The HERA System for Radiation Monitoring on Orion Exploration Missions and the International Space Station
	Summary , Discussion, next Location of WRMIS

### EXCURSION (15:30 18:30)

### ADJOURN