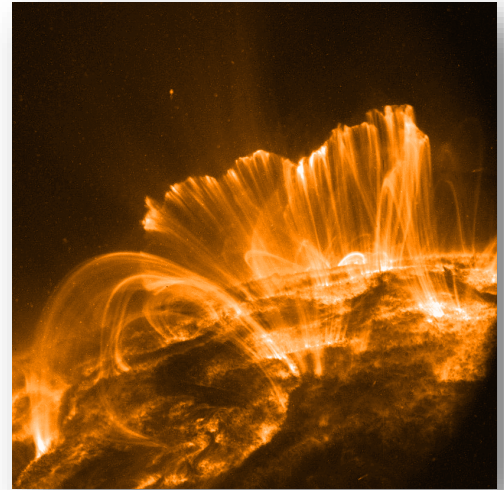

Calculation of Radiation Exposure at Aviation Altitudes in Case of Solar Particle Events

April 19, 2023, 14:00
19th EURADOS Webinar



Credit: NASA, TRACE

Calculation of Radiation Exposure at Aviation Altitudes in Case of Solar Particle Events, April 19, 2023, 14:00

14:00 Welcome from coordinator “EURADOS WG11 High Energy Radiation Fields” (5 min)

Veronika Olšovcová, EURADOS WG11 Secretary

14:05 Introduction to EURADOS WG11/TG3 and this Webinar (10 min)

Peter Beck, Seibersdorf Laboratories, Austria – Chair WG11/TG3

14:15 Characteristics of solar particle events affecting aviation (30 min)

Erwin Flückiger, University of Bern - Physikalisches Institut / HFSJG, Switzerland

14:45 Comparison of calculated radiation exposure for selected flight routes and events (15min)

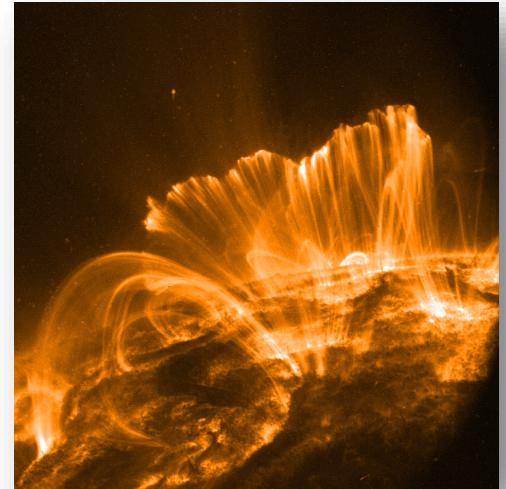
Marcin Latocha, Seibersdorf Laboratories, Austria

15:00 Conclusions and perspectives (10 min)

Jean Francois Bottollier-Depois, IRSN, France

15:10 Questions & Answers (10 min)

Peter Beck (Coordinator), Seibersdorf Laboratories, Austria – Chair WG11/TG3



Credit: NASA, TRACE

Welcome from coordinator “EURADOS WG11 High Energy Radiation Fields”

Veronika Olšovcová, EURADOS WG11 Secretary

Task groups of WG11 (High energy radiation fields)



Task 1 - Comparison of Monte Carlo codes using ICRP 103 conversion factors for Radiation Exposure of Aircraft Crew

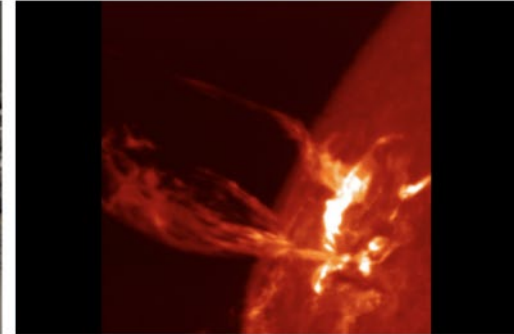
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Task Group leader: Marcin Latocha
(Seibersdorf Laboratories, Austria)



Task 2 - Dosimetry in pulsed radiation fields

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Task Group leader: Marco Caresana (POLIMI, Italy)

Study of the response of passive and active detectors at extremely high dose-rate produced by very short and intense radiation bursts.



Task 3 - Improvement of the models for dose assessment due to solar particle events and validation with experimental data

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Task Group leader: Peter Beck (Seibersdorf Laboratories, Austria)

Task groups of WG11 (High energy radiation fields)



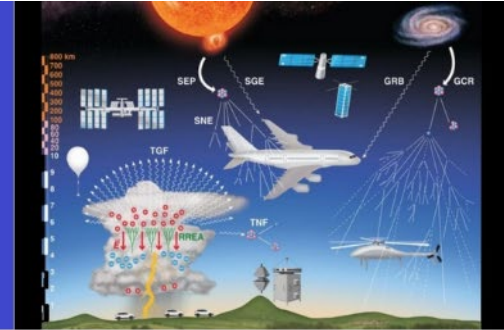
Task 4 - Solar particles events measurements

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Task Group leader: Iva Ambrožová (Nuclear Physics Institute of the Czech Academy of Sciences, Czech Republic)



Task 7 - High energy reference field

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Task Group leader: Eike Hohmann (PSI, Switzerland)



Task 8 - Radiation dose induced by natural electric discharge in the atmosphere

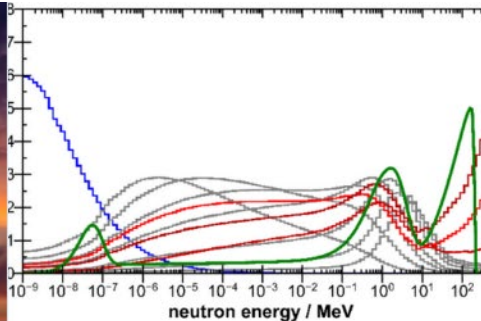
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Task Group leader: Ondrej Ploc (Nuclear Physics Institute of the Czech Academy of Sciences, Czech Republic)

Task groups of WG11 (High energy radiation fields)



Task 10 - Operational Procedure for GLE Management

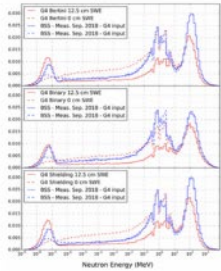
Task Group leader: Peter Beck (Seibersdorf Laboratories, Austria)



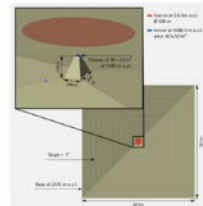
Task 11 - Course on unfolding neutron spectra

Task Group leader: Marcel Reginatto (PTB, Germany)

Measured & simulated neutron spectra



Geant4 implementation



Task 12 - Benchmark of the MC models used for high energy neutrons

Task Group leader: Vladimir Mares (HMGU, Germany)

Annual meeting: June 12-15, 2023

Porto, Portugal
www.eurados.org



The deadline for early registration (reduced fee) is 5 May 2023.
Please register by 1 June 2023 at latest.