Nuclear Science and Technology Symposium SYP2019 will be held in Marina Congress Center, Helsinki, Finland on October 30th - 31st 2019 by Finnish Nuclear Society ATS. Nearly 200 nuclear professionals and students will gather for two days of scientific and technical presentations and panels. Adjacent to the Symposium will be SYP2019 Exhibition.

**KEYNOTES BY LEADING PROFESSIONALS**

Keynote speakers address the current situation in nuclear industry:

- Operating plants and new development in Finland
- EDF EPR under operation, commissioning or construction: FA3, TSN and HPC
- Main EPR projects under development: JAITAPUR, SIZEWELL C
- Future low-carbon electricity systems and uranium resources
- Future nuclear fuel technologies and ATF
- Ensuring competence for safe and efficient operation
- Nuclear technology for space settlements and exploration

**THE REGISTRATION FEE INCLUDES**

- Welcome Reception at Helsinki City Hall on Tuesday October 29th on 18:00-19:30
- Access to the conference events, conference materials and services, buffet lunches and coffee breaks
- SYP2019 Exhibition
- Conference dinner at Sipuli on Wednesday October 30th


**DL FOR NORMAL REGISTRATION IS**

**15.10.2019**
**PRELIMINARY LIST OF PRESENTATIONS** (version 1.10.2019 - subject to changes)

**DL FOR NORMAL REGISTRATION IS 16.10.2019**

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B. Wahlström et al.
- Human and Organisational Factors in Perspective

H. Pirkkalainen
- Utilizing Machine Learning in Nuclear Power Plant Lifecycle Management

M. Hartikainen
- I&C accelerated ageing and I&C re-engineering PWR Steam Generator Secondary Maintenance Strategy

R. Rintamaa et al.
- Surveys of development needs for licensing model of nuclear installations in Finland - Main findings and recommendations

M. Bolander
- PWR Steam Generator Secondary Maintenance Strategy

K. Hassinen
- Licensing of NP Projects, experiences in Finland

J. Lehmuskoski
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- Advanced Cladding Materials for Accident Tolerant Fuels

J. Peltonen et al.
- Coolant-cladding interaction models in FINIX fuel behaviour module

C. Huotilainen et al.
- Jules Horowitz Reactor – the Future of European Materials Testing Reactors

S. Jaeckel
- Fuel Integrity Under Dry And Wet Storage

S. Siltanen et al.
- Simultaneous Reconstruction of Emission and Attenuation in Passive Gamma Emission Tomography of Spent Nuclear fuel

H. Loukusa
- Full-core uncertainty analysis of nuclear fuel behavior
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- Lessons learned during planning and first phases of decommissioning of the Finnish TRIGA FIR 1

**N. Bergh**
- International Decommissioning Planning and Cost Estimating Feedback

**A. Leskinen et al.**
- Intercalibration Exercise for Difficult-To-Measure Radionuclides in Activated Steel

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- Improvement of Different Analytical Techniques to Characterize Radionuclides Difficult to Measure and Toxics in Nuclear Waste

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- Digital Twins for Smarter Decommissioning

**P. Juutilainen et al.**
- Impact of Fuel Type and Discharge Burnup on Spent Fuel Properties

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**TRACK 4: WASTE**

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**M. Olin et al.**
- MIND - Development of the Safety Case Knowledge Base about the Influence of Microbial Processes on Geological Disposal of Radioactive Wastes

**E. Holt et al.**
- PREDIS - Pre-disposal management of radioactive waste

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**O. Nummi**
- The safety case for Loviisa LILW repository 2018

**E. Myllykylä**
- Dissolution of spent nuclear fuel - Results from completed EU-project REDUPP and ongoing project DISCO
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M. Rämä
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