Closing session

- General Chair comments and some figures
- Honorary Chairs messages
- Honorary Chairs distinctions
- Student Poster Awards
- Final word by General Co-Chair Michele FERENCI
- 303 participants
- 37 students
- 26 countries:
  - Austria (1), Australia (1), Belgium (5), Canada (1), China (17), Czech Republic (3), Germany (14), France (100), Grèce (1), Israël (1), Italia (11), Japan (45), Korea (23), Netherland (1), Poland (1), Portugal (1), Russia (2), Slovenia (3), Spain (5), Sweden (2), Switzerland (9), Tunisia (1), Turkey (3), Taïwan (3), UK (17), USA (32)
Dr. Francesco Cerutti, CERN, Switzerland, “Machine and radiation protection challenges of high energy/intensity accelerators: the role of Monte Carlo calculations”

Dr. Masashi Hirano, Nuclear Regulation Authority, Japan, “Outline of the Fukushima Daiichi Accident. Lessons Learned and Safety Enhancements”

Dr. Rebecca M. Howell, University of Texas, USA, “Neutron Measurements in Proton Radiation Therapy”

Prof. Dr. Robert F. Wimmer-Schweingruber, University of Kiel, Germany, “From Earth to Moon, Mars and - Beyond Space Radiation and Implications for Human Exploration”

Prof. Abdelmajid Mahjoub, Arab Atomic Energy Agency, Tunisia, “AAEA contribution to Safety enhancement in the Arab countries”
“Fukushima five years after”: 13

“Neutron experimental studies under the quasi-monoenergetic neutron field in the energies from 100 to 400 MeV”: 7
SuperMC Tutorial
Jing Song - “Key Laboratory of Neutronics and Radiation Safety, Chinese Academy of Sciences, Institute of Nuclear Energy Safety Technology, Chinese Academy of Science . FDS Team”

Attila4MC-Software for Simplifying Monte Carlo
Greg Failla, Sr. Manager - Attila Product Line Varian Medical Systems - Imaging Components

MRT Methodologies for Real-Time Particle Transport Simulation of Nuclear Systems
Prof. Alireza Haghighat Virginia Tech Transport Theory Group (VT3G) Director of Nuclear Engineering and Science Lab (NSEL) at Arlington Nuclear Engineering Program, Mechanical Engineering Department Arlington, VA, USA

RayXpert - 3D radiation modeling software with Monte Carlo solver
Hugo Canovas -TRADE - Sales Manager
129 oral presentations in // sessions

T1_Nuclear Data, Radiation Detection, Measurements & Dosimetry: 27

T2_Shielding Experiments & Benchmarks: 10

T3_Accelerators & Fusion Facilities: 12

T4_Medical Facilities, Radiotherapy & Medical Applications, Space Dosimetry & Shielding: 20

T5_Fission Facilities, Fuel Cycle & Waste Management Facilities, Decommissioning: 25

T6_Calculation methods Monte Carlo & Deterministic: 35
### Parallel sessions

#### Monday October 3, 2016

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<td>Thomas Miller; Cedric Jouanne</td>
<td>Ivan Kodeli; Joachim Miss</td>
<td>Lawrence HeiBrom; Vladimir Mares; H. Grady Hughes; Eric Dementiell</td>
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#### Tuesday October 4, 2016

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**SS2 : "Neutron experimental studies under the quasi- monoenergetic**

**Yosuke Iwamoto**
66 Posters

17 student posters

T1_Nuclear Data, Radiation Detection, Measurements & Dosimetry: 23

T2_Shielding Experiments & Benchmarks: 8

T3_Accelerators & Fusion Facilities: 10

T4_Medical Facilities, Radiotherapy & Medical Applications, Space Dosimetry & Shielding: 3

T5_Fission Facilities, Fuel Cycle & Waste Management Facilities, Decommissioning: 10

T6_Calculation methods Monte Carlo & Deterministic: 11

SS2 _Neutron spallation source session: 1
Some trends

✓ Methods and codes
Monte Carlo transport evidently more and more used both for applications and for fundamental research:
- analogue simulation for nuclear instrumentation
- completeness of representation of radiation phenomena
- coupling of physical phenomena: transport/depletion, neutron/photon/charged particles...

✓ Deterministic still very useful w.r.t.:
- performance
- 3D adjoint information for Monte Carlo (variance reduction)
- well adapted for coupling particle transport and depletion.

✓ Simplified methods:
- heuristic approach,
- meta models e.g. for optimization,
- Coupling (e.g. simplified charged particle slowing down)

✓ Powerfull pre- and post- treatment tools
- input data e.g. geometry/materials 2D & 3D
- results of calculations, intermediate information (e.g. particle tracks)
Some trends

✓ Extension of the needs of *nuclear & atomic data*
  ▪ to answer to safety requirements
  ▪ for high energy ranges (above 20 MeV) for both application & research fields
  ▪ Investigation of very low energy range

✓ Development of *multiscale & multiphysics approaches*
  (physics/biology/chemistry...)

✓ Emergence of *holistic approach* (particularly for safety in extreme situations)

✓ Uncertainties?
ICRS-13 & RPSD-2016 Award

To Dr. Jean-Claude NIMAL

“In recognition of his outstanding scientific contribution in the field of Computational Radiation Shielding”

Paris, October 3-6, 2016
ICRS-13 & RPSD-2016 Award

To Dr. Enrico SARTORI

“In recognition of his outstanding action to promote the international scientific community of Radiation Protection & Shielding”

Paris, October 3-6, 2016
ICRS-13 & RPSD-2016

POSTER AWARD

To

Karen Arlet GUZMAN-GARCIA

for the contribution entitled

10B+ZnS(Ag) as an alternative to 3He-based detectors for Radiation Portal Monitors

Dr. Michele FERENCI
General co-Chair

Dr. Thomas MILLER
Technical co-Chair

Dr. Toshiya SANAMI
Technical co-Chair

ICRS-13 & RPSD-2016 AWARDS CEREMONY - OCTOBER 6 - PARIS
To
Sylvain MEYLAN

for the contribution entitled

Modeling of the human genome with DnaFabric for the calculation of radio-induced DNA damages
Thanks to all the attendees

Thanks to Patricia, Michèle & Lise from SFEN

ICRS-13 & RPSD-2016