

Announcement of the PHITS Tutorial in Myanmar

Place: University of Mandalay, Myanmar

<http://www.mu.edu.mm/>

Address: University Drive, 73rd St. Mandalay, Myanmar

Date: 2019 Dec. 3-5

Deadline for registration: 2019 Nov. 1st

Registration Fee: Free

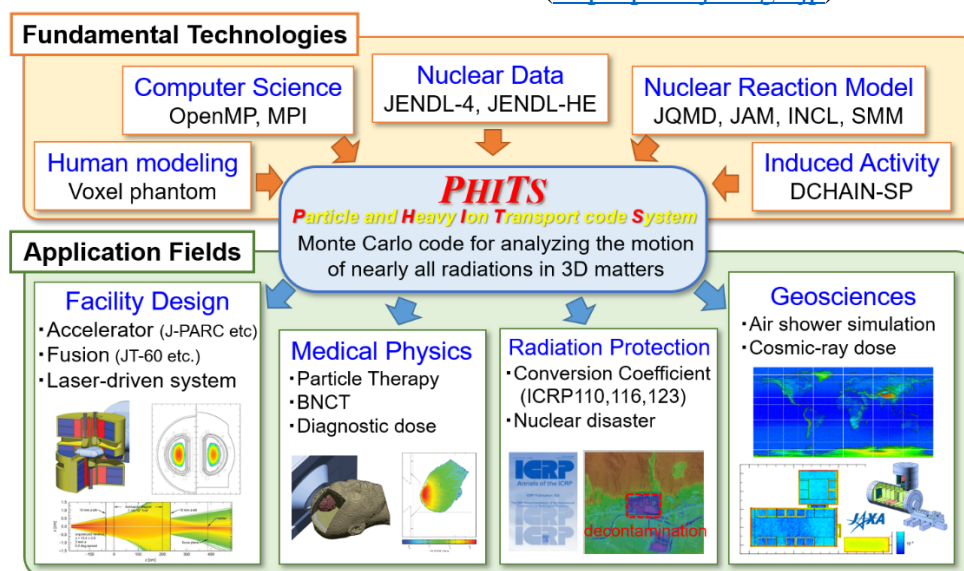
Language: English

Eligibility for participation: None (Open to everybody¹)

Lecturer: Dr. Tatsuhiko Sato, Leader of PHITS development team, JAEA, Japan

Local organizer: Dr. NyeinWink Lwin, Mandalay University

PHITS is a general purpose Monte Carlo particle transport simulation code developed under collaboration between Japan Atomic Energy Agency (JAEA) and several institutes all over the world. It can deal with the transport of nearly all particles over wide energy ranges, using several nuclear reaction models and nuclear data libraries. PHITS can support your researches in the fields of accelerator technology, radiotherapy, space radiation, and in many other fields which are related to particle and heavy ion transport phenomena. See PHITS website in more detail. (<http://phits.jaea.go.jp>)



Overview of the PHITS code

¹ Attendees must obtain the PHITS license in prior to the course. The distribution of the PHITS code is controlled by Japanese law, and we may not be able to accept the participation from country/institute of weapon development concern.

If you would like to attend the course, you have to obtain the license of the latest version of PHITS. It is free of charge, and the instruction to get the license is given below (<https://phits.jaea.go.jp/howtoget.html>). Attendees from Myanmar must submit the application form to the local organizer (Dr. NyeinWink Lwin, nyeinwinklwin@gmail.com), while attendees from other countries must submit it through PHITS website. When you submit the application form via PHITS website, please select “Submission of application form” in the contact page of PHITS website, and write “I would like to attend PHITS course in Myanmar, Dec 2019” in the message body. If you have already obtained the PHITS license, please select “Registration for PHITS tutorial”, and write “Myanmar, Dec 2019” in the column of “Tutorial to attend”.

Attendees must bring a laptop PC with either Windows or Mac OS. During the course, they will learn the basic usage of PHITS such as the construction of 3D geometry and the definition of source particles and tallies. The basic knowledge of the radiation physics is encouraged to be learned in prior to attending this course.

If you have any question about the course, please Email to Dr. NyeinWink Lwin nyeinwinklwin@gmail.com (for Burmese), or PHITS office phits-office@jaea.go.jp (for non-Burmese) with your information (Affiliation, Nationality).

Tentative Program

Tuesday 3 December

9:00-9:45: Registration

9:45-10:00: Open ceremony

10:00-10:30: Installation

11:00-12:00: Introduction of PHITS

(lunch)

13:00-16:00: Basic Lecture (input format & geometry)

16:30-17:30: Basic Lecture (source definition)

Wednesday 4 December

9:00-12:00: Basic Lecture (tally definition)

(lunch)

13:00-15:30: Basic Lecture (parameter setting)

16:00-17:30: Exercise (stop α , β , γ -rays & neutron)

Thursday 5 December

9:00-11:00: Exercise (melt snowman by proton beam!)

11:30-12:30: Summary

CV of Lecturer

Name

Tatsuhiko Sato

Position/Organization

Principal Researcher / Japan Atomic Energy Agency

Specially appointed professor / Osaka University



Education and employment history

1996 Mar. B.Sc., Department of Nuclear Engineering, Kyoto University

1998 Mar. M.Sc., Department of Nuclear Engineering, Kyoto University

2001 Mar. Ph.D., Department of Nuclear Engineering, Kyoto University

2001 Apr. Researcher, Japan Atomic Energy Research Institute

2005 Oct. Researcher, Japan Atomic Energy Agency (due to re-organization)

2011 Oct. – Principal Researcher, Japan Atomic Energy Agency

2018 Dec. – Specially appointed professor, Osaka University (Cross appointment contract)

Major professional accomplishments

He is the principal investigator of the current PHITS development team. He also used the code by himself for cosmic-ray research and medical physics. He developed a model for estimating the terrestrial cosmic-ray fluxes for both solar quiet and storm periods based on the airshower simulation performed by PHITS. He also developed a model for estimating the therapeutic effects of charged particle therapy and boron neutron capture therapy based on the microdosimetric simulation performed by PHITS. He is a member of International Commission on Radiological Protection (ICRP) Committee 2 since 2017. He published more than 150 peer-reviewed papers including 45 corresponding-author ones, and they have been cited by more than 3,000 times (according to Google Scholar).

Awards

2007 Mar. Award for Distinguished Technology Development, Atomic Energy Society of Japan

2010 Jan. Award for Young Investigator, Innovative Nuclear Research and Development Program, Japan Science and Technology Agency

2010 Apr. The Young Scientists' Prize, The Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology

2014 Mar. Special Award for Distinguished Technology Development, Atomic Energy Society of Japan