Announcement of the PHITS Tutorial in Morocco2025

General information

Place: Faculty of Sciences, Ibn Tofail University of Kenitra, Morocco (https://fs.uit.ac.ma)

Eligibility for participation: None (Open to everybody[1])

Course date: Nov. 24-26, 2025

Deadline for registration: Oct.8, 2025for new PHITS user
Nov. 8, 2025 for registered PHITS users

Maximum number of participants: 50 (accepted in order of registration)

Registration Fee: Free (Cost for lunch and coffee break will be charged 350 MAD per participant or 35 Euro for participant out Morocco)[2]

Language: English

Course contents: Basic course

Lecturer: Dr. Tatsuhiko Sato (Japan Atomic Energy Agency), Japan

Local organizer:

- Dr. Abdessamad Didi (Hassan First University, Settat, Morocco)
- Prof. El Mahjoub Chakir (Ibn Tofail University of Kenitra, Morocco)
- Prof. Zouhair Sadoune (Ibn Tofail University of Kenitra, Morocco)

This tutorial will be held in prior to the International Conference on Applied Sciences and Innovation (ICASIN'2025, https://icasin2025.sciencesconf.org/), but it is not a part of the congresses. Therefore, registration is separately required for attending this tutorial. Participation of persons who do not attend ICASIN'2025 is also welcome. However, we recommend registering to both events because another workshop related to PHITS and other Monte Carlo codes will be held during ICASIN'2025.

[1] Attendees must obtain the PHITS license in prior to the course. Registration might be declined due to the capacity of the rooms for tutorial.

[2] We will ask you to transfer the money to a Moroccan bank after the registration

Registration procedures

If you would like to attend the tutorial, you must obtain the PHITS license before the course. It is free of charge, and the instruction to get the license is given below (https://phits.jaea.go.jp/howtoget.html).It takes approximately 1.5 month for the approval process so that the application form must be submitted to JAEA by Oct. 8, 2025. When you submit the application form, please select “Submission of application form” in the contact page of PHITS website and write “I would like to attend PHITS course in Morocco2025” in the message body. If you have already obtained the PHITS license, lease select “PHITS tutorial registration” in the contact page of PHITS website and select “Moroccan Tutorial 2025” or write “I would like to attend PHITS course in Morocco 2025” in the message body.

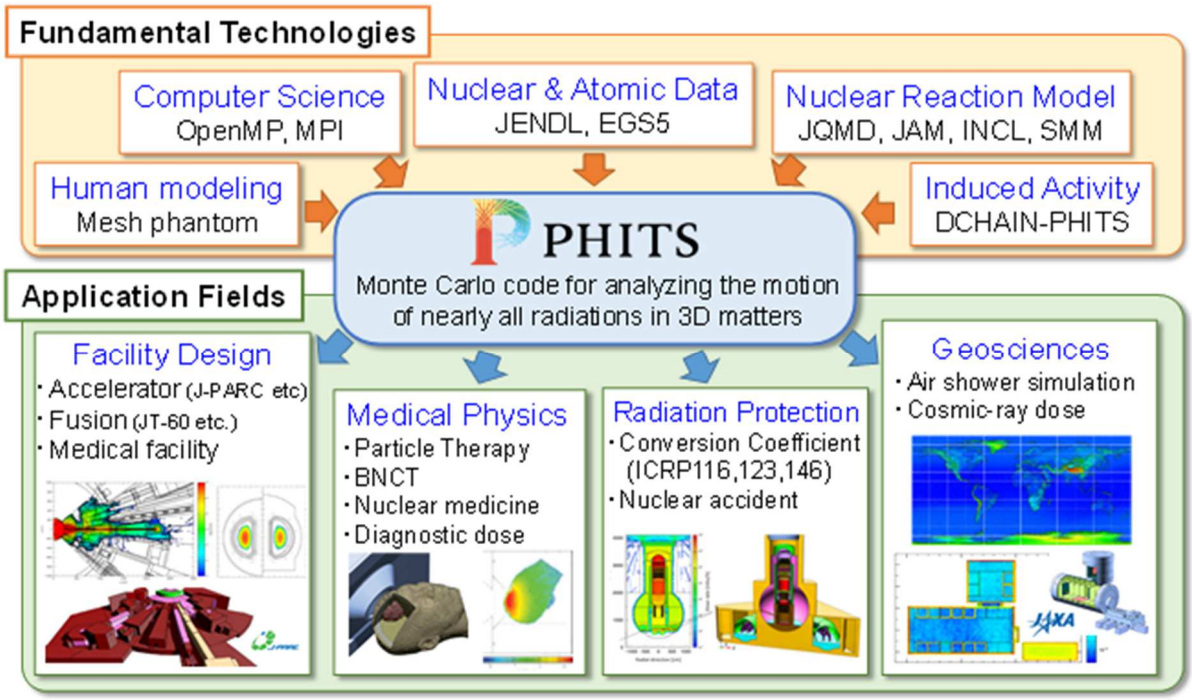
Attendees must bring a laptop PC with either Windows or Mac OS.There is no particular skill that should be learned in prior to attending the beginner course, but we recommend to take a brief look of PHITS tutorial video on YouTube to grasp the image of the tutorial contents.
https://www.youtube.com/playlist?list=PLe8Wrr-sE8vy-ygWoAqWVrvK89PfxUFYO

Contact

If you have any question about the course, please contact us via PHITS website (https://phits.jaea.go.jp/contact/edit/en). For any information regarding the organization, please contact the ICASIN'2025 conference organizers via the link: https://icasin2025.sciencesconf.org/resource/page/id/7 or by email: icasi2025@outlook.com

About PHITS

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

Tentative program

Monday, Nov. 24, 2025
9:30-10:00: Registration
10:00-11:00: Installation & introduction I
11:00-11:15: (coffee Break)
11:15-12:00: Installation & introduction II
(lunch)
13:30-15:00: Basic Lecture I (geometry)
15:00-15:30: (coffee break)
15:30-17:30: Basic Lecture I (geometry)

Tuesday, Nov. 25, 2025
09:30-10:30: Basic Lecture II (source)
10:30-10:45: (coffee break)
10:45-12:00: Basic Lecture II (tally)
(lunch)
13:30-15:00: Basic Lecture III (tally)
15:00-15:30: (coffee break)
15:30-17:30: Basic Lecture III (parameter setting)

Wednesday, Nov. 26, 2025
09:30-10:30: Basic Lecture III (parameter setting)
10:30-10:45: (coffee break)
10:45-12:00: Exercise (stop α, β, γ-rays & neutron)
(lunch)
13:30-15:00: Exercise (stop α, β, γ-rays & neutron)
15:00-15:30: (coffee break)
15:30-17:00: Exercise (melt snowman)
17:00-17:30: Summary and Q&A

Lecturer profile

Name

Tatsuhiko Sato

Position/Organization

Research fellow / Japan Atomic Energy Agency

Specially appointed professor / Osaka University

Education and employment history

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)

2022 Apr. – Research fellow, Japan Atomic Energy Agency

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 200 peer-reviewed papers including 53 corresponding-author ones, and they have been cited by approximately 10,000 times (according to Google Scholar).