



Announcement of the PHITS Tutorial in Vietnam, 2023



In collaboration with the PHITS development team (Japan Atomic Energy Agency -JAEA, Japan), A tutorial course will be held in Hanoi, Vietnam. PHITS is a general-purpose Monte Carlo particle transport simulation code developed under the collaboration among Japan Atomic Energy Agency (JAEA) and several institutes 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 research works in the fields of accelerator technology, radiotherapy, space radiation, dosimetry and in many other fields which are related to particle and heavy ion transport phenomena. See PHITS website for more details. (<http://phits.jaea.go.jp>).

Tutorial information

Venue: Institute for Nuclear Science and Technology (INST), VINATOM

<http://www.inst.gov.vn/index.php/eng>

Address: 179 Hoang Quoc Viet, Nghia Do, Cau Giay, Ha Noi

Date: 2023, Mar. 27-31

Tutorial fee: FREE

Language: English

Eligibility for participation: None (Open to everybody¹)

Lecturer: Dr. Tatsuhiko Ogawa (Phits-en-tutorial@jaea.go.jp), JAEA, Japan

For registration

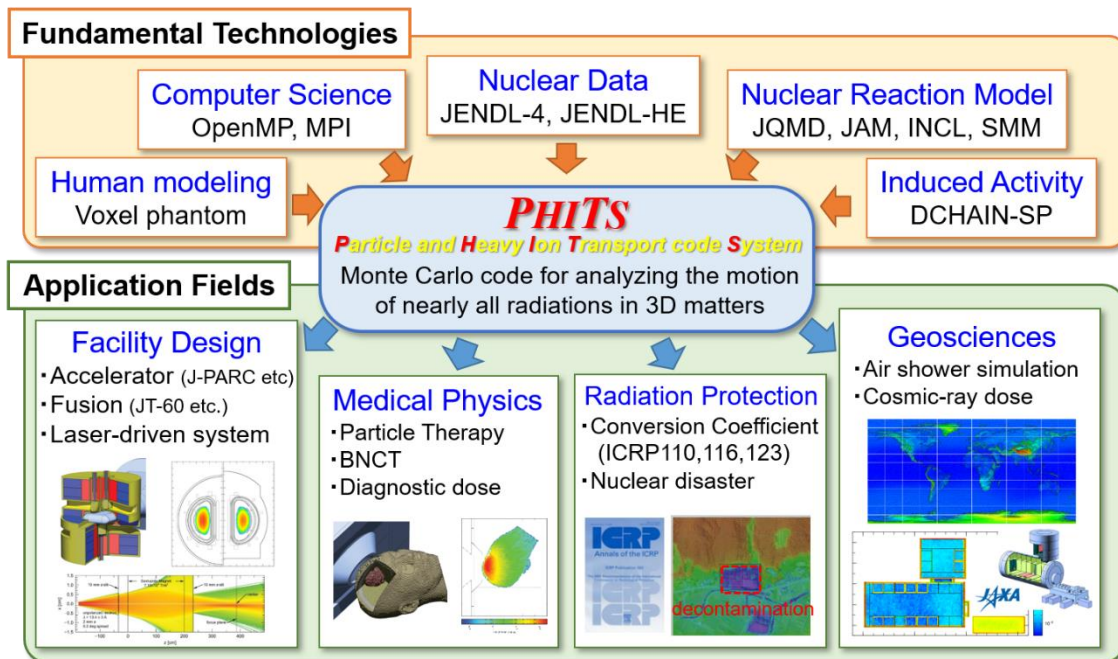
Co-organizer: Dr. Le Ngoc Thiem (Thiem.LNT@gmail.com), INST,

VINATOM

Deadline: 2023 Feb. 15 (Non-licensed Users), 2023 Mar. 10 (Licensed Users)

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.

INTRODUCTION to the PHITS code



Overview of the PHITS code

Before the tutorial

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>). When you submit the application form, please select “Submission of application form” in <https://phits.jaea.go.jp/contact/edit/en>, and write “I would like to attend PHITS course in VINATOM, Mar. 2023” in the message body. If you have already obtained the PHITS license, please contact or send an application from <https://phits.jaea.go.jp/contact/edit/en> with “Registration for PHITS tutorial”, and write “In person tutorial in Vietnam (27-31st Mar. 2023)” 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. At the end of the course, they will be encouraged to conduct PHITS simulation for their own purpose under support of lecturer. There is no particular skill that should be learned in prior to attending this course.

If you have any question about the course, please Email to Dr. Le Ngoc Thiem

thiem.lnt@gmail.com (for Vietnamese), or PHITS office phits-office@jaea.go.jp (for non-Vietnamese) with your information (Affiliation, Nationality).

Tentative Agenda

Monday 27 Mar.

Morning : Opening (incl. self-introduction of participants)

Morning 2: Overview of the PHITS code and its application to ionizing radiation protection, dosimetry

(lunch)

13:30-14:30: Introduction and Installation of the Code

14:30-14:45: Break

14:45-16:00: Basic Lecture (input format & geometry)

16:00-16:15: Break

16:15-17:30: Basic Lecture (input format & geometry)

Tuesday 28 Mar.

09:30-10:30: Basic Lecture (source definition)

10:30-10:45: Break

10:45-12:00: Basic Lecture (tally definition)

(lunch)

13:30-14:30: Basic Lecture (tally definition)

14:30-14:45: Break

14:45-16:00: Basic Lecture (parameter setting)

16:00-16:15: Break

16:15-17:30: Basic Lecture (parameter setting)

Wednesday 29 Mar.

9:30-11:30: Exercise (stop α , β , γ -rays & neutron)

(lunch)

13:00-14:30: Exercise (melt snowman by proton beam!)

14:30-14:45: Break

14:45-16:00: Advanced Lecture (complicated source definition)

16:00-16:15: Break

16:15-17:30: Advanced Lecture (Complementary functions)

Thursday 30 Mar.

Hands-on exercises

Friday 31 Mar.

9:30-12:00: Practical Simulation for Each Participant

(lunch)

Afternoon: Free Q&A