



Announcement of the PHITS Tutorial in Vietnam, 2024



In collaboration with the PHITS development team (Japan Atomic Energy Agency -JAEA, Japan), a tutorial course will be held in Da Lat, 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: Dalat Nuclear Research Institute, VINATOM

<https://nri.gov.vn/en>

Address: 01 Nguyen Tu Luc, Dalat, Lam Dong

Date: 2024, Mar. 11-15

Tutorial fee: FREE

Language: English

Eligibility for participation: None (Open to everybody¹)

Lecturer: Dr. Takuya Furuta and Dr. Yuho Hirata, JAEA, Japan
Phits-en-tutorial@jaea.go.jp

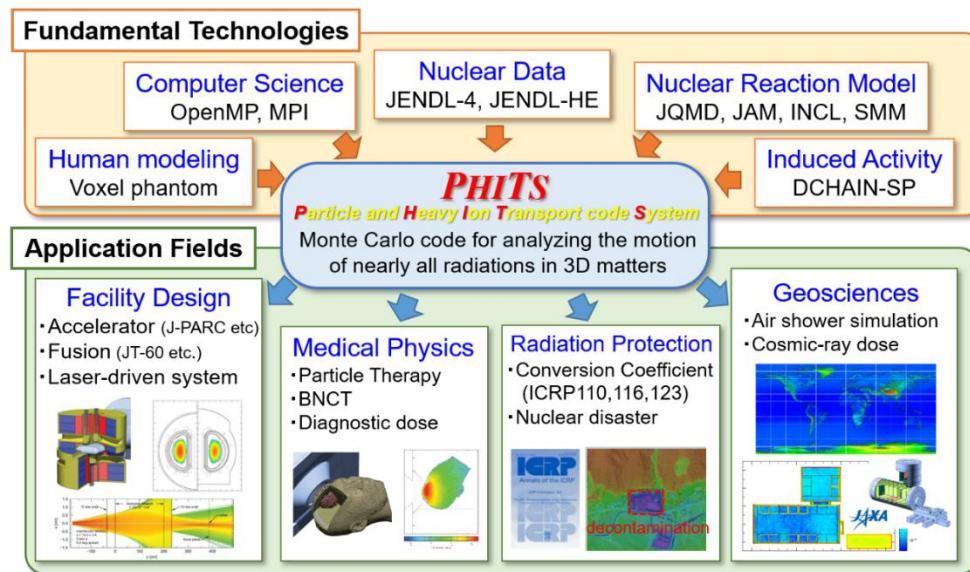
For registration

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

Deadline: 2024 Feb. 9 (Non-licensed Users), 2024 Mar. 4 (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 Vietnam, Mar. 2024" in the message body (Deadline: [2024 Feb. 9](#)). 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 choose "In person tutorial in Vietnam (11-15th Mar. 2024)" in the column of "Tutorial to attend" (Deadline: [2024 Mar. 4](#)).

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 11 Mar.

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

Morning 2: Introduction and Installation of the Code

(lunch)

13:30-14:30: Basic Lecture (input format & geometry)

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 (source definition)

Tuesday 12 Mar.

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

10:30-10:45: Break

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

(lunch)

13:30-14:30: Basic Lecture (parameter setting)

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 13 Mar.

9:30-10:30: Advanced lecture (definition of source energy distribution)

10:30-10:45: Break

10:45-12:00: Advanced lecture (definition of source energy distribution)

(lunch)

13:30-14:30: Exercise (stop α , β , γ -rays & neutron)

14:30-14:45: Break

14:45-16:00: Exercise (melt snowman by proton beam!)

16:00-16:15: Break

16:15-17:30: Exercise (melt snowman by proton beam!)

Thursday 14 Mar.

9:30-10:30: Advanced lecture (complicated source definition)

10:30-10:45: Break

10:45-12:00: Advanced lecture (complicated source definition)

(lunch)

Hands-on exercises

Friday 15 Mar.

9:30-12:00: Advanced lecture (variance reduction)

(lunch)

Afternoon: Free Q&A