

Dear colleagues,

It is our great pleasure to inform you that following PHITS international online tutorials will be held.

1, Beginners' course, 10th-14th Jun. 2024.

2, Advanced course, 18th-22nd Nov. 2024.

The course and PHITS license are completely free of charge.

The beginners' course is dedicated to those who would like to start using PHITS or those who once learned PHITS but would like to review it. Please feel free to forward this message to your colleagues who are interested in PHITS.

In order to participate to the tutorials, please be sure to have a network environment stable enough to run a Zoom client.

Please follow the instructions below to register for the tutorials.

#### 1, Tutorial registration

Access to <https://phits.jaea.go.jp/contact/edit/en>

Select "PHITS tutorial registration" in "Category" pull-down menu.

Fill out the form and send it.

If you wish to participate to both beginners' and advanced courses, please send the form twice, one for the beginners' course and the other for the advanced course.

#### Remarks

Please type your full name including your middle names.

Please use your institutional email address (free addresses such as Gmail cause problems afterwards).

If you are a foreigner living in Japan more than 6 months, please write the name and E-mail address of your Japanese supervisor in the "message body".

If the webform does not work (i.e. you do not receive an automatic reply), please send the registration information to [phits-en-tutorial@jaea.go.jp](mailto:phits-en-tutorial@jaea.go.jp) .

#### 2, PHITS license application

Please select 2-1, 2-2 or 2-3 depending on your status.

2-1 For foreigners living in Japan more than 6 months

Access to <https://phits.jaea.go.jp/annai-tutorial.html>

Follow the instruction there. Please ask your Japanese supervisor to help you out.

2-2-1 PHITS non-users or users with Ver.3.09 or older, and NOT working in either of the following countries (Argentina, Austria, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Netherlands, Norway, Poland, Portugal, Republic of Korea, Spain, Sweden, Switzerland, United Kingdom.)

Access to <https://phits.jaea.go.jp/howtoget.html>

Fill out the form.

Send the form from <https://phits.jaea.go.jp/contact/edit/en> selecting "Submission of license application form" category.

If the webform does not work, please send the format to [phits-license@jaea.go.jp](mailto:phits-license@jaea.go.jp) .

2-2-2 PHITS non-users or users with Ver.3.09 or older, and working in either of the following countries (Argentina, Austria, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Netherlands, Norway, Poland, Portugal, Republic of Korea, Spain, Sweden, Switzerland, United Kingdom.)

Send a license request form to OECD-NEA Databank

<https://www.oecd-nea.org/tools/cpsrequest/start/NEA-1931%2501>

2-3 For PHITS users with Ver.3.10 or newer

You can download the latest version later. Please wait for the follow-up messages.

3, Read and follow the announcement (e.g., schedule, login guidance, etc) sent from [phits-en-tutorial@jaea.go.jp](mailto:phits-en-tutorial@jaea.go.jp) later.

PHITS office

----- Tutorial Timetable-----

## Beginners' Course Schedule

(Time: **Coordinated Universal Time**)

Date : 10th-14th Jun. 2024. UTC 11:00-14:00 (Short breaks: 12:00-12:10, 13:00-13:10)

Registration deadline for new users: 9th May 2024

Registration deadline for current users: 3rd Jun. 2024

10<sup>th</sup> Jun. (Mon)

- 10:00 - 11:00 PHITS installation and checkup (optional)
- 11:00 - 12:00 Opening and PHITS overview
- 12:00 - 14:00 Basic Lecture 1-1 (geometry settings)  
¥phits¥lecture¥basic¥lec01
- 14:00 - 15:00 Post-course free Q&A

11<sup>th</sup> Jun. (Tue)

- 11:00 - 12:00 Basic Lecture 1-2 (source settings)  
¥phits¥lecture¥basic¥lec01
- 12:00 Group photo
- 12:00 - 14:00 Basic Lecture 2 (Tally settings)  
¥phits¥lecture¥basic¥lec02
- 14:00 - 14:30 Post-course free Q&A

12<sup>th</sup> Jun. (Wed)

- 11:00 - 12:00 Basic Lecture 2 (Tally settings (continued))  
¥phits¥lecture¥basic¥lec02
- 12:00 - 14:00 Basic Lecture 3 (parameter setting 1)  
¥phits¥lecture¥basic¥lec03
- 14:00 - 14:30 Post-course free Q&A

13<sup>th</sup> Jun. (Thu)

- 11:00 - 12:00 Basic Lecture 3 (parameter setting 2)  
¥phits¥lecture¥basic¥lec03

12:00 - 14:00 Advanced Lecture 1 (advanced source definition)

¥phits¥lecture¥advanced¥sourceA

14:00 - 14:30 Post-course free Q&A

14<sup>th</sup> Jun. (Fri)

11:00 - 12:20 Exercise (stop  $\alpha$ ,  $\beta$ ,  $\gamma$ -rays & neutrons)

¥phits¥lecture¥exercise¥range

12:20 - 13:50 Exercise (melt snowman by proton beam!)

¥phits¥lecture¥exercise¥snowman

13:50 - 14:00 Closing session

14:00 - 14:30 Post-course free Q&A

# Beginners' Course Schedule (Time: Japan Standard Time)

Date : 10th-14th Jun. 2024. (Short breaks: 21:00-21:10, 22:00-22:10)

10<sup>th</sup> Jun. (Mon)

19:00 - 20:00 PHITS installation and checkup (optional)

20:00 - 21:00 Opening and PHITS overview

21:00 - 23:00 Basic Lecture 1-1 (geometry settings)

¥phits¥lecture¥basic¥lec01

23:00 - 24:00 Post-course free Q&A

11<sup>th</sup> Jun. (Tue)

20:00 - 21:00 Basic Lecture 1-2 (source settings)

¥phits¥lecture¥basic¥lec01

21:00 Group photo

21:00 - 23:00 Basic Lecture 2 (Tally settings)

¥phits¥lecture¥basic¥lec02

23:00 - 23:30 Post-course free Q&A

12<sup>th</sup> Jun. (Wed)

20:00 - 21:00 Basic Lecture 2 (Tally settings (continued))

¥phits¥lecture¥basic¥lec02

21:00 - 23:00 Basic Lecture 3 (parameter setting 1)

¥phits¥lecture¥basic¥lec03

23:00 - 23:30 Post-course free Q&A

13<sup>th</sup> Jun. (Thu)

20:00 - 21:00 Basic Lecture 3 (parameter setting 2)

¥phits¥lecture¥basic¥lec03

21:00 - 23:00 Advanced Lecture 1 (advanced source definition)

¥phits¥lecture¥advanced¥sourceA

23:00 - 23:30 Post-course free Q&A

14<sup>th</sup> Jun. (Fri)

20:00 - 21:20 Exercise (stop  $\alpha$ ,  $\beta$ ,  $\gamma$ -rays & neutrons)

¥phits¥lecture¥exercise¥range

21:20 - 22:50 Exercise (melt snowman by proton beam!)

~~¥phits¥lecture¥exercise¥snowman~~

22:50 - 23:00 Closing session

23:00 - 23:30 Post-course free Q&A

----- Tutorial Timetable -----

## Advanced Course Schedule

(Time: **Coordinated Universal Time**)

Date : 18<sup>th</sup> -22<sup>nd</sup> Nov. 2024. UTC 11:00-15:00 every day. (Short breaks: 12:00-12:10, 13:00-13:10, 14:00-14:10)

Registration deadline for new users: 17th Oct. 2024

Registration deadline for current users: 11th Nov. 2024

18<sup>th</sup> Nov. (Mon)

- 10:30 - 11:00 PHITS installation and checkup
- 11:00 - 12:00 Opening and overview of recent PHITS updates
- 12:00 - 13:30 Review Exercise 1 (stop  $\alpha$ ,  $\beta$ ,  $\gamma$ -rays & neutron)  
¥phits¥lecture¥exercise¥range
- 13:30 - 15:00 Review Exercise 2 (melt snowman by proton beam!)  
¥phits¥lecture¥exercise¥snowman
- 15:00 - 16:00 Post-course free Q&A

19<sup>th</sup> Nov. (Tue)

- 11:00 - 12:30 Advanced Lecture 1 (definition of sources with energy distribution)  
¥phits¥lecture¥advanced¥sourceA
- 12:30 Group photo
- 12:30 - 14:00 Advanced Lecture 2 (Counter, Transform, Magnetic field)  
¥phits¥lecture¥advanced¥options
- 14:00 - 15:00 Advanced Lecture 3 (Variance reduction 1)  
¥phits¥lecture¥advanced¥WeightA
- 15:00 - 15:30 Post-course free Q&A

20<sup>th</sup> Nov. (Wed)

- 11:00 - 13:00 Advanced Lecture 6 (Variance reduction 2)  
¥phits¥lecture¥advanced¥WeightB
- 13:00 - 15:00 Advanced Lecture 7 (DCHAIN-PHITS)  
¥phits¥lecture¥advanced¥DCHAIN1
- 15:00 - 15:30 Post-course free Q&A

21<sup>st</sup> Nov. (Thu)

- 11:00 - 12:30 Advanced Lecture 8 (Use of particle dump)  
¥phits¥lecture¥advanced¥SourceB
- 12:30 - 15:00 Optional lectures 1 (participants can take one of them)  
Advanced Lecture 10-1 (Accelerator and Shielding Design)  
¥phits¥lecture¥advanced¥shielding  
Advanced Lecture 10-2 (BNCT)  
¥phits¥lecture¥therapy¥BNCT  
Advanced Lecture 10-3 (X-ray therapy)  
¥phits¥lecture¥therapy¥XrayTherapy
- 15:00 - 15:30 Post-course free Q&A

22<sup>nd</sup> Nov. (Fri)

- 11:00 - 13:00 Optional lectures 2 (participants can take one of them)  
Advanced Lecture 11-1 (Detector simulation exercise)  
¥phits¥advanced¥detector  
Advanced Lecture 11-2 (Cosmic rays)  
¥phits¥lecture¥advanced¥CosmicRay  
Advanced Lecture 11-3 (Medical data treatment)  
¥phits¥utility¥RT¥phits
- 13:00 - 15:00 Advanced Lecture 12 (automated run using script files)  
¥phits¥utility¥script¥instruction
- 15:00 - 15:10 Closing session
- 15:10 - 15:30 Post-course free Q&A



# Advanced Course Schedule (Time: Japan Standard Time)

Date : 18<sup>th</sup> -22<sup>nd</sup> Nov. 2024. JST 20:00-24:00 every day.

(Short breaks: 21:00-21:10, 22:00-22:10, 23:00-23:10)

18<sup>th</sup> Nov. (Mon)

- 19:30 - 20:00 PHITS installation and checkup
- 20:00 - 21:00 Opening and overview of recent PHITS updates
- 21:00 - 22:30 Review Exercise 1 (stop  $\alpha$ ,  $\beta$ ,  $\gamma$ -rays & neutron)  
¥phits¥lecture¥exercise¥range
- 22:30 - 24:00 Review Exercise 2 (melt snowman by proton beam!)  
¥phits¥lecture¥exercise¥snowman
- 24:00 - 25:00 Post-course free Q&A

19<sup>th</sup> Nov. (Tue)

- 20:00 - 21:30 Advanced Lecture 1 (definition of sources with energy distribution)  
¥phits¥lecture¥advanced¥sourceA
- 21:30 Group photo
- 21:30 - 23:00 Advanced Lecture 2 (Counter, Transform, Magnetic field)  
¥phits¥lecture¥advanced¥options
- 23:00 - 24:00 Advanced Lecture 3 (Variance reduction 1)  
¥phits¥lecture¥advanced¥WeightA
- 24:00 - 24:30 Post-course free Q&A

20<sup>th</sup> Nov. (Wed)

- 20:00 - 22:00 Advanced Lecture 6 (Variance reduction 2)  
¥phits¥lecture¥advanced¥WeightB
- 22:00 - 24:00 Advanced Lecture 7 (DCHAIN-PHITS)  
¥phits¥lecture¥advanced¥DCHAIN1
- 24:00 - 24:30 Post-course free Q&A

21<sup>st</sup> Nov. (Thu)

- 20:00 - 21:30 Advanced Lecture 8 (Use of particle dump)  
¥phits¥lecture¥advanced¥SourceB
- 21:30 - 24:00 Optional lectures 1 (participants can take one of them)  
Advanced Lecture 10-1 (Accelerator and Shielding Design)  
¥phits¥lecture¥advanced¥shielding

	Advanced Lecture 10-2 (BNCT)
	¥phits¥lecture¥therapy¥BNCT
	Advanced Lecture 10-3 (X-ray therapy)
	¥phits¥lecture¥therapy¥XrayTherapy
24:00 - 24:30	Post-course free Q&A
22 <sup>nd</sup> Nov. (Fri)	
20:00 - 22:00	Optional lectures 2 (participants can take one of them)
	Advanced Lecture 11-1 (Cosmic rays)
	¥phits¥lecture¥advanced¥CosmicRay
	Advanced Lecture 11-2 (Medical data treatment)
	¥phits¥utility¥RTphits
22:00 - 24:00	Advanced Lecture 12 (automated run using script files)
	¥phits¥utility¥script¥instruction
24:00 - 24:10	Closing session
24:10 - 24:30	Post-course free Q&A