

Dear colleagues,

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

1, Beginners course, 19<sup>th</sup>-23<sup>rd</sup> Jun. 2023.

2, Advanced course, 9<sup>th</sup>-13<sup>th</sup> Oct. 2023.

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 For PHITS non-users or users with Ver.3.09 or older (i.e., everyone except the users whose PHITS license was granted after April 2019 by JAEA)

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) .

2-3 For PHITS users with Ver.3.10 or newer (i.e., the users whose PHITS license was granted after April 2019 by JAEA)

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 : 19<sup>th</sup>– 23<sup>rd</sup> June 2023 (Short breaks: 12:00-12:10, 13:00-13:10)

Registration deadline for new users: 11th May 2023

Registration deadline for current users: 12th Jun. 2023

19<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

20<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

21<sup>st</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

22<sup>nd</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

23<sup>rd</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 : 19<sup>th</sup>– 23<sup>rd</sup> June 2023 (Short breaks: 21:00-21:10, 22:00-22:10)

19<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

20<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

21<sup>st</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

22<sup>nd</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

23<sup>rd</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 : 9th-13th Oct. 2023. 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: 31st Aug. 2023

Registration deadline for current users: 25th Sep. 2023

9<sup>th</sup> Oct. (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

10<sup>th</sup> Oct. (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

11<sup>th</sup> Oct. (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

12<sup>th</sup> Oct. (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

13<sup>th</sup> Oct. (Fri)

11:00 - 13:00 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

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 : 9th-13th Oct. 2023. JST 20:00-24:00 every day.

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

9th Oct. (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

10th Oct. (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

11th Oct. (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

12th Oct. (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

13st Oct. (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