



Announcement of the International PHITS Tutorial and Workshop in Indonesia 2026

- ✓ Place: Physics department room, Udayana University, Denpasar Bali, Indonesia
- ✓ Eligibility for participation: Registered PHITS user¹
- ✓ Course date: 28 - 31th July, 2026
- ✓ Deadline for registration: 24th June, 2026 for new PHITS users
14th July, 2026 for registered PHITS users
- ✓ Maximum number of participants: 75 (accepted in order of registration)
- ✓ Registration Fee: free (For lunch and coffee break during 4 days will be charged IDR. 1.000.000 per participant)
- ✓ Registration page: <https://forms.office.com/r/BFu4CeZktN>
- ✓ Language: English
- ✓ Course contents: Basic course
- ✓ Lecturer: Tatsuhiko Sato (Japan Atomic Energy Agency), Japan
- ✓ Local organizer:
 - Yohannes Sardjono (National Research and Innovation Agency (BRIN))
 - Dewa Ngurah Yudhi Prasada (Universitas Udayana)
 - Eny Latifah (Universitas Negeri Malang)
 - Ratna Dewi Syarifah (Universitas Jember)

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>).

Attendees must bring a laptop PC with either Windows or Mac OS². 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. There is no particular skill that should be learned in prior to

¹The license of PHITS can be obtained in free of charge by submitting application form through the registration page. It takes approximately a month for the approval process so that the registration deadline for new PHITS user is set to 24th June 2026.

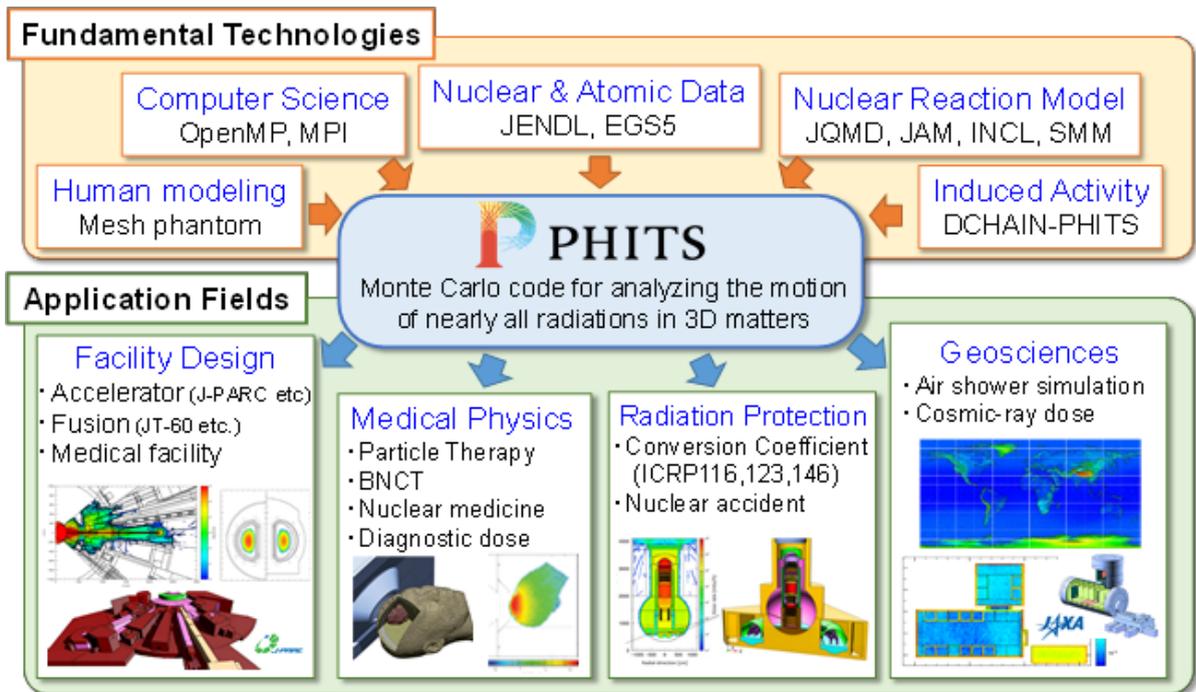
²Linux PC is not recommended unless the PHITS installation has been completed successfully. We cannot support the installation to Linux PC during the course.

attending the basic course, but we recommend to take a brief look of PHITS tutorial video on YouTube to grasp the tutorial contents.

<https://www.youtube.com/playlist?list=PLe8Wrr-sE8vy-ygWoAqWVrvK89PfxUFYO>

If you have any question about the course, please contact us via PHITS website

(<https://phits.jaea.go.jp/contact/edit/en>).



Overview of the PHITS code

Tentative Program

Monday, 27th July 2026

Time	Topic
18:00-20:00	Pre-course meeting for determining the course details (Only for invited speakers and organizers)

Tuesday, 28th July 2026

Time	Topic
08:00 – 08:30	Registration and Welcome Speech by Dean of Faculty of Mathematic and Natural Science UNUD and Head of Research Center for Nuclear Safety, Metrology and Nuclear Quality Technology (PRTKMNN) BRIN
08:30 – 08:55	Opening ceremony by the Rector of Universitas Udayana
08:55 – 09:20	Current Status and Future Plan of Cancer Therapy in Indonesia by Vice Minister of Health of the Republic of Indonesia
09:20 – 09:45	Current Status and Future Plan of Research and Innovation to Support Cancer Therapy in Indonesia by Vice Head of BRIN
09:45 – 10:10	Current Status of Regulation Related with the Application of Radiation for Health especially the BNCT and PBT by Acting Chairman of BAPETEN
10:10 – 10:35	Current Status and Future Plan of Cyclotron for Boron Neutron and Capture Therapy (BNCT) and Proton Beam Therapy (PBT) in The World by General Manager Medical System Sales Group, Sumitomo Heavy Industries, Ltd., Japan, Dr. Yoshihito Kameda
10:35 – 11:00	Comments and discussions by Moderator
11:00 – 12:00	Installation PHITS Codes
12:00 – 13:00	Lunch
13:00 – 13:25	Current Status and Future Plan of Cancer Therapy Facility at Dharmais of National Cancer Center Hospital (RSKN Dharmais) by President Director of RSKN Dharmais
13.25 – 13:50	Current Status and Future Plan of Radiodiagnostic and Radiotherapy in International Hospital Special Economic Zones Sanur Bali by President Director International Hospital Sanur Bali
13:50 – 14:15	Question and Answer by Moderator
14:15 – 16:00	Introduction & Basic Lecture I (Geometry & Source) by Research Fellow, JAEA, Prof. Tatsuhiko Sato
16:00 - 16:30	Coffee break

Wednesday, 29th July 2026

Time	Topic
08:00-10:00	Basic Lecture I (Geometry & Source) by Research Fellow, JAEA, Prof. Tatsuhiko Sato
10:00-10:30	Coffee break
10:30-12:00	Basic Lecture I (Geometry & Source) by Research Fellow, JAEA, Prof. Tatsuhiko Sato
12:00-13:00	Lunch
13:00-16:00	Basic Lecture II (Tally) by Research Fellow, JAEA, Prof. Tatsuhiko Sato
16:00-16:30	Coffee break

Thursday, 30th July 2026

Tim	Topic
08:00-10:00	Basic Lecture II (Tally) by Research Fellow, JAEA, Prof. Tatsuhiko Sato
10:00-10:30	Coffee break
10:30-12:00	Basic Lecture III (Parameter setting) by Research Fellow, JAEA, Prof. Tatsuhiko Sato
12:00-13:00	Lunch
13:00-14:30	Basic Lecture III (Parameter setting) by Research Fellow, JAEA, Prof. Tatsuhiko Sato
14:30-16:00	Exercise (stop α , β , γ -rays & neutron) by Research Fellow, JAEA, Prof. Tatsuhiko Sato
16:00-16:30	Coffee break

Friday, 31th July 2026

Time	Topic
08:00-10:30	PHITS workshop by Prof. Sardjono, Mr. Isman, Mr. Gede, Mr. Fendi, Mr. Nurokhim, Mr. Ismail, Mr. Dewa Ngurah Yudhi Prasada, Ms. Eny Latifah, Ms. Ratna Dewi Syarifah
10:30-11.00	Coffee break
11:00-12:00	Exercise (Melt Snowman by Proton Beam) by Research Fellow, JAEA, Prof. Tatsuhiko Sato
12:00-13:00	Lunch
13:00-14:00	Exercise (Melt Snowman by Proton Beam) by Research Fellow, JAEA, Prof. Tatsuhiko Sato
14:00-15:00	Closing Remarks by Dean of FMIPA UNUD and Head of Research Center for Nuclear Safety, Metrology and Quality Technology (PRTKMNN) BRIN
15.00-16.00	QA Session, Research Fellow, JAEA, Prof. Tatsuhiko Sato, Senior Researcher PRTKMMN BRIN, Prof. Yohannes Sardjono, and Lecturer FMIPA UNUD Mr. Dewa Ngurah Yudhi Prasada

Vice Minister of Health of the Republic of Indonesia

Name

dr. Benjamin Paulus Octavianus, Sp.P.(K)

Position/Organization

Vice Minister of Health of the Republic of Indonesia

Education and employment history

1994 – General Medical Education, Universitas Kristen Indonesia

2004 – Pulmonology Specialist, Universitas Brawijaya

2025 – Vice Minister of Health of the Republic of Indonesia



Vice Head of the National Research and Innovation Agency of the Republic of Indonesia

Name

Prof. Dr. Ir. Amarulla Octavian, M.Sc.

Position/Organization

Vice Head of the National Research and Innovation Agency

Education and employment history

1988 – Naval Academy, Indonesia

2013 – Doctoral degree at Universitas Indonesia

2021 – Professor, Universitas Pertahanan Republik Indonesia

2016 - Dean of the Faculty of Defense Management, Universitas Pertahanan RI

2020 - 2023 – Rector of the Universitas Pertahanan

2023 – Vice head of the National Research and Innovation Agency



Acting Chairman of Nuclear Energy Regulatory Agency of Indonesia

Name

Ir. Zainal Arifin, M.T.

Position/Organization

Acting Chairman of the National Research and Innovation Agency

Education and employment history

1993 – Bachelor degree at Universitas Gadjah Mada, Indonesia (Nuclear Engineering)

2003 – Master degree at Universitas Gadjah Mada, Indonesia (Industrial Safety Engineering)

2020 – Chairman Deputy for Licensing and Inspection Nuclear Energy Regulatory Agency of Indonesia

2025 – Acting Chairman of Nuclear Energy Regulatory Agency of Indonesia



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 air shower 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 micro-dosimetry 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 51 corresponding-author ones, and they have been cited by more than 8,000 times (according to Google Scholar).



Dr. Yoshihito Kameda

1982 Graduated Dept. of English Studies, Sophia University 1982 Joined Sumitomo Heavy Industries, Ltd. Worked at Overseas Sales Dept. for Industrial Equipment 1995-1998 Worked at Sumitomo Heavy Industries (USA) Inc. 1998 Manager of Sales Group for Industrial Equipment 1999 Manager of Sales Group for Quantum Equipment 2010-2012 General manager of Sales Dept. for Quantum Equipment 2013-2017 Group Leader of Medical System Group 2018-2020 General Manager of Marketing & Sales Dept., Medical & Advanced Equipment Unit 2021-2022 Specially-Appointed General Manager of Marketing & Sales Dept., Medical & Advanced Equipment Unit.