

2nd International Workshop on Gas Dynamic Trap based Fusion Neutron Source (GDT-FNS)

Organizers



Budker Institute of Nuclear Physics (BINP) of SB RAS, Russia



Institute of Nuclear Energy Safety Technology (INEST), CAS, China

Date: Monday-Tuesday, 11-12 November 2019

Place: Conference Hall, BINP, Novosibirsk, Russia

Agenda

Gas-Dynamic Trap (GDT) is one of the most promising concepts to be a high-flux Fusion Volumetric Neutron Source (FVNS) for fusion nuclear science and technology development, and for driving fusion-fission hybrid reactor. The Budker Institute of Nuclear Physics (BINP), the Siberian Branch of the Russian Academy of Sciences (SB RAS), and the Institute of Nuclear Energy Safety Technology (INEST), Chinese Academy of Sciences (CAS) have jointly initiated an international mega science program on Gas Dynamic Trap based Fusion Neutron Source (GDT-FNS) following their scientific orientation and research experience. The First International GDT-FNS Workshop was jointly held in November of 2018 in Hefei, China by the two institutes as the first step to attract more partners to join in this work. It resulted in a project of Compact Volumetric Neutron Source (CVNS).

The second GDT-FNS workshop will be held in Novosibirsk, Russia and will involve discussing various topics related to GDT-FNS development such as:

- Objectives and plans;
- Design goals and technology gaps;
- Cooperation partners and research bases;
- Proposed requirements of GDT-FNS;
- Advantages and drawbacks of GDT- based FNS;
- GDT experiments and development status;
- Steady-state operation of GDT.
- Physical issues of FVNS;
- Multi Applications of FVNS;
- Roadmap of FVNS mega-science project;
- Roadmap of development of key technologies;
- Concept design and engineering design;
- Key technologies R&D list;
- Compact Volumetric Neutron Source.

The scientific program includes invited plenary and topical oral presentations.

International Advisory Committee

- Honorary Chair: Prof. Dmitri Ryutov (TAE, US)
- Co-Chair: Prof. Alexander Ivanov (BINP, RU)
- Co-Chair: Prof. Yican Wu (INEST, CN)
- Dr. Peter Bagryansky (BINP, RU)
- Dr. Alexey Beklemishev (BINP, RU)
- Prof. Zhibin Chen (INEST, CN)
- Prof. Sergey Putvinsky (TAE, US)
- Prof. Cary Forest (University of Wisconsin–Madison, US)
- Prof. Olov Ågren (Uppsala University, SE)
- Prof. Mizuki Sakamoto (University of Tsukuba, JP)

Local Organizing Committee

- Prof. Igor Kotelnikov (BINP, RU)
- Dr. Maksim Kuzin (BINP, RU)
- Dr. Anton Sudnikov (BINP, RU)
- Mr. Andrey Prokopenko (BINP, RU)
- Dr. Vadim Prikhodko (BINP, RU)

Workshop Venue

The Workshop will take place in the Budker Institute of Nuclear Physics in the Akademgorodok of Novosibirsk, Russia. Akademgorodok is located 30 km from the downtown of Novosibirsk. Novosibirsk is Russia's third-largest city, situated 3000 km to the East from Moscow in the very heart of Siberia and is connected by regular flights with Moscow, St-Petersburg, Beijing, Shanghai, Tokyo, Frankfurt and Istanbul.

Visa information (Important!)

We will prepare an official invitation (certificate) for your visa application, which will be issued by the Local Authority Department of Foreign Affairs. Its preparation takes about four weeks, and then it will be sent to you by express mail. With this invitation, you should apply for a visa to Russian Embassy/Consulate where consideration can last about one week. Therefore, the Organizing Committee asks you to fill the Registration form as soon as possible. Please also prepare a scanned copy of the first double page of your travel passport where your photo and main personal data are placed: this is a mandatory requirement. Additional documents may be needed. Please attach this file to the registration form available through the Workshop web site.

Please note that accompanying persons should fill in the registration form as well.

Accommodation

Participants of the Workshop will be offered single (default option) or double rooms in the two-star hotel of the Siberian Branch of Russian Academy of Science "Zolotaya dolina" ("Golden Valley") located close to the Budker Institute (15 minutes on foot). Another option is a four-star Parkwood hotel, which is at a large distance and requires transportation that will be provided by

the organizers and hotel.

The Organizing Committee will make room reservation itself to give you a discount. The discount rates are for the Workshop attendees and accompanying persons only if booked through the Organizing Committee. Please indicate your choice at the Registration Form. Please provide us with your arrival/departure dates.

Key Dates

Online registration deadline: 14 October 2019

Abstract submission deadline: 26 October 2019

Conference Convened: 11-12 November 2019

Arrival day: 10 November 2019

Departure day: 13 November 2019

Web site and E-mail

Main page: <https://indico.inp.nsk.su/event/19/>

Online registration: <https://indico.inp.nsk.su/event/19/registration/>

Abstract submission: <https://indico.inp.nsk.su/event/19/call-for-abstracts/>

Email: gdt2019@inp.nsk.su

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