

SINQ/SmuS/LTP USER OPERATION: SPECIFIC SAFETY CONCEPT UNDER COVID-19 (valid from 10.8.2020)

This safety concept supplements the protection concept generally valid for PSI and defines its implementation (<https://intranet.psi.ch/Pandemistab/FaqAntrag>). The PSI protection concept has higher-level validity.

In brief, the safety concept relies on:

- Low number of users on site
- Low interaction rate between users
- Enhanced hygiene standards
- Small motion range of users

SINQ/SmuS/LTP User operation with adequately sized teams

The neutron, muon and LTP instruments are operated with teams of visiting users. For most of these instruments, completely remote use of the instruments by the users is not possible or not desired.

For SINQ and SmuS instruments, the number of users per experiment is limited to 2. If possible, a combination of remote and local use should be encouraged. For LTP experiments, the number of guest scientists is kept to the absolute minimum required, and remote operation is encouraged as well where possible.

Safety measures at the instruments and experiments

Work at the instruments and experiments has to proceed with physical distancing and regular hand-washing, as prescribed by the Swiss government and the PSI protection concept.

Physical distancing

People should keep a distance of at least 1.5 m at all times. If this is not possible, face masks have to be worn.

Specifically, for SINQ instruments, only one person is permitted in the instrument hutches without a mask, and no more than two people wearing a mask, with the exception of the ICON and FOCUS hutches, where two people without a mask and three people wearing a mask are allowed.

For SmuS instruments, two people are permitted in the instrument hutches and the sample environment studio D in the WEHA without a mask. During shift handover or instruction by the instrument scientist, up to three persons are permitted for a short period (< 15 min) without a mask. If three people are present for a longer period, wearing a face mask is mandatory. In the electronics hutches, a maximum of two people is permitted. If two people are present in an electronics hutch, wearing a face mask is mandatory.

For LTP experiments, a maximum of two people is allowed in the counting houses except for shift handover, where up to three persons are permitted for a short period (< 15 min). Workspaces inside the counting houses are designed to be >2m apart and not facing each other. Windows of the counting houses must be opened at least hourly to bring in fresh air.

For operation of the Proton Irradiation Facility PIF, a separate concept has been submitted on June 14th by HM32 and has been accepted already.

Special care has to be taken if two people need to work closely together, e.g. for mounting heavy or delicate equipment or for a hands-on introduction to an experiment. In such cases, it is mandatory to use face masks.

All standard safety measures remain unaltered. For example, chemical safety may require that some people do not work alone. This can be realized, e.g. via a direct line of sight through a window of the lab to a neighboring area, or, if this is not possible, via checks by a second person in regular intervals, triggered by an electronic device like a lab timer, smartphone or computer.

Hand washing

It is unavoidable that several persons touch the experimental setup, tools, door handles, access control (PSYS) panel, keyboards, work surfaces, etc. It is therefore paramount to wash or disinfect hands regularly, especially prior to touching the face or eating.

The options for hand washing in the SINQ/SmuS/LTP instruments are very limited. Users mainly use the lavatories outside the supervised zones for hand washing. Therefore, a number of stations with disinfectant dispensers will be (have been) positioned near instruments, so that instrument scientists and users can regularly disinfect their hands. In addition, each user will receive a bottle of hand-disinfectant upon check-in at PSI and PSI staff received such bottles as well.

Face masks

Face masks are locally available at the instruments and experiments, and they have to be worn for work where a physical distance of 1.5m to other people cannot be kept.

Corona Contact Diaries

All external users have to maintain a contact diary similar to PSI employees, which allows contact tracing in case any infection occurs.

User Instruction

The established standard procedures apply. Prior to the beamtime, the external users perform the standard general online safety training. At the beginning of a beamtime, the local contact performs the regular safety instruction of the users. This instruction will of course take place applying distance rules. The local contact will remind the users of their responsibility to follow BAG and PSI guidelines, especially distance keeping and hand washing.

Instrument specific measures, such as distant workplaces in the control room, maximum permissible users in the instrument hutches, and procedures ensuring both chemical and coronavirus safety are part of this instruction. The users sign a standard form on which they confirm the safety instruction. They are responsible for following the safety guidelines.

The local contact and all beamline staff are entitled to stop work, if safety measures are not followed. Support is provided by the local contact and, as second level and also in case the local contact cannot be reached, via the control room. In case of emergencies, the number 3333 is to be called -- as announced at the instrument phones.

Travel to PSI

PSI defined rules for the reception of visitors and user operation (both documents are available at <https://intranet.psi.ch/Pandemistab/FaqAntrag>). The spirit of these guidelines applies to users of our facilities as well. For example, people who show COVID-19 symptoms are not allowed to travel to PSI.

Users travelling for experimental campaigns to our facilities are registered in the digital user office DUO. The users and their employer are responsible for considering if the user belongs to the group of persons at high risk and if the travel and stay at PSI are safely possible. The instruction of and contact persons for users has been sketched above.

Regulations for traveling into and out of Switzerland as well as quarantine are made by the federal or cantonal authorities and the current rules must be observed by visitors and users when planning to travel to PSI. It should be noted that any quarantine cannot be done at the PSI guest house. Additionally, PSI reserves its right to apply additional restrictions to access the PSI campus.

Reducing user motion range

Users typically focus on their experiments and spend only little time on other activities. Supporting this behavioral pattern will contribute to reduce infection risks.

Guest house

By providing accommodation in the PSI guesthouse (see separate safety concept), we considerably reduce the range of motion required from our users. As we expect reduced numbers of users, the guest house capacity will very likely suffice and thus travel by public transport to accommodation in neighboring villages will not be required.

Catering

We think it is important that the users are provided with food on site, rather than accessing nearby supermarkets or individually ordering food delivery. Via the nearby cafeteria with lunch service Timeout and the provisioning of vending machines for the off hours the most important contribution to the catering-part of the concept is given. For the evenings and nights, vending machines in Timeout are available.

During the weekends, the established Food Trucks are on site. The Food Trucks offer their service opposite the Timeout, i.e. in open air with plenty of space for distance-keeping. Furthermore, if the weather allows for this, users prefer eating their Food Truck food at the tables in front of the Timeout, i.e. another open-air component contributing to safety. The food is served in disposable tableware, contributing to hygienic conditions.