

HUMAN LAB GUIDELINES

According to the current SISSA Coronavirus Policy, the activity of researchers, technical and administrative staff is resumed. Furthermore, **experimental activities with external participants are allowed** and the following procedure was defined to carry out safely the experiments in human laboratories. Please, **read the procedure scrupulously to become confident with it**. Additionally, **consider the possibility to go to SISSA at least once before starting to test**, in order to become familiar with the new SISSA regulation and the laboratory instructions.

Access to SISSA

From **29/06/20**, both SISSA staff and students can access to SISSA **without a specific authorization**, except for patients susceptible to COVID-19 infection. You can find all the details at the following link: <https://www.sissa.it/news/access-sissa-phase-2>

From **10/09/20**, the body temperature measurement by **thermo-scanner** is active and thus **it is possible to access to SISSA at any time**, although it is still mandatory to enter from the **main entrance on the ground floor**. Please be patient and keep safety distance: presumably short queues will be at the entrance.

Please, refer to the **email sent by Safety** (Servizio Prevenzione e Protezione; object of the email "Attivazione e procedure termoscaner/Thermoscanner activation and procedures") for the **details of the procedure**. In short, access with **no restrictions is allowed from Monday to Saturday from 8.00 to 20.00** (i.e., during Reception working hours). **Outside Reception working hours** (from Monday to Saturday from 20.00 to 08.00, and Sunday), **access is only exceptionally allowed for mandatory and motivated working reasons**, previously approved by your own P.I. and ruled by ad hoc D.D. Access is controlled by video surveillance and any transgression will be punished.

Sign the attendance sheet (name, surname, phone number, room number, and incoming signature) upon entering.

Collect and wear the **surgical mask**. Change your mask with the one provided at the entrance (in case you will not reuse your mask, it must be thrown in the dedicated basket), wash your hands with the available hydroalcoholic solution and wear the mask provided;

Upon exiting SISSA, sign the attendance sheet.

Please, remind to fill or update the online "**Return to work statement**". You should have already received it via email. It is necessary to **fill the statement once before returning to SISSA** and **update it only in case of changes**. The Health and Safety Service (room 422) is in charge of sending the online statement. For any question, please write an email to safety@sisssa.it.

Keep in mind that a **maximum number of occupants** (which depends on the room size) can work in each **office**. **Organize your presence with that of your office mates**, so as not to exceed the maximum limit.

If you do not have your own means of transport, or you prefer not to use it, you can use **the shuttle service** that SISSA has set up due to the COVID-19 emergency. You can find all the details at the following link: <https://www.sissa.it/news/access-sissa-phase-2>

Experimental activity in the laboratories

How to book a time-slot

It is possible to use the **online booking system** (<http://nbwww.sissa.it/services/mrbscns/web/>). **Keep in mind the general SISSA procedure to enter and the time to sanitize the room after each experiment when you plan your time-slots.** As you will see, the booking system is a bit changed: unavailable rooms were removed and the possibility to book separately the behavioral booths in rooms 344 and 248 was changed with a unique calendar for each room.

Participant recruitment

External participants can be recruited. To access to SISSA, **participants must fill in the “Access to SISSA Statement”.** **The Statement must be collected during the recruiting phase,** in order to check in advance whether a participant is authorized to enter the School. **External participants can access only if they declare that all the sentences in the Statement are true.** For any question, please contact the Health and Safety Service (room 422; safety@sisssa.it).

Each researcher is responsible for the Statements of her/his participants. In case of necessity, the Health and Safety Service can ask you the Statements and an updated list of recruited and tested participants.

Running the experiment

The participants assess to SISSA following the general SISSA procedure. At the entrance, their **body temperature** will be checked and they **have to sign a dedicated attendance sheet** (name, surname, room, floor, researcher’s name, signature in, signature out, and confirmation of what declared in the Statement). As room, the participant will indicate the number of the lab in which the experiment will be carried out.

Additionally, **the first time a researcher will collect a participant at the reception, she or he will also indicates her/his name, surname, room and phone number (mobile phone) in a dedicated sheet.** This **do not substitute the attendance sheet for SISSA people** (see the paragraph *Access to SISSA*), but will be used **in case of an emergency** in the School, together with the participants’ attendance sheet, to contact both the researcher and the participant.

The participants must wear the surgical mask in the School. In case a participant do not reuse the mask worn on arrival, she or he can change the mask with one provided at the entrance. **Gloves are provided in the lab.** **The researcher waits the participant at the main entrance** (floor 0) and accompanies her or him in the laboratory. Please, remember that moving inside the building must be kept to a minimum, dedicated paths must be followed and the use of a mask is always required. Whenever toilets are used, it is recommended that you remove your gloves and wash your hands before and after doing your physiological need. Afterwards put new gloves on.

Before entering the lab corridor, participant must disinfect the hands by washing or by using the disinfectant solution provided at the disinfection point (**COVID station**; see floor maps below). **In the lab, the participant must wear surgical masks and gloves.** Some exceptions for gloves are allowed (see specific indications below).

Close interactions with the participants (distance < 2 m AND duration > 15 min) must be kept at the minimum and the appropriate Personal Protective Equipment (PPE, see below) must be used.

At the end of the experimental session, the researcher accompanies the participant at the main entrance (floor 0). The participant signs the dedicated attendance sheet and leaves the School.

General indications

It is recommended to prepare the room before the participant arrives:

- cover the **participant's chair** with the **medical paper roll** provided in each room,
- if the participant uses a **chin rest**, cover the parts touched by the chin and the forehead with **disposable tissue papers**.
- if the participants uses **headphones**, choose a set that could be disinfected or protect the parts in touch with the ears with a **disposable cover**.

To sanitize the laboratory, enough time must be ensured between one experimental session and the following. The researcher must **change the disposable seat and headphone cover** and **disinfect all the surfaces and the devices touched by the participant** (i.e., keyboard, mouse, headset, chin rest, hangers, table, and chair) used by the participant. Please, pay attention to disinfect all parts of the participant's chair possibly touched by her or him (i.e., armrest of the chair, lower parts the chair touched to move it). Finally, the researcher must **open the windows (if the weather conditions permit)** and **leave the room for at least 20 minutes. During this time, no one can stay in the room.** In the case the experiment is carried out inside an **EEG cabin** or a **psychophysics booth**, the **break between a participant and the next one** must last **1 hour**.

Surface disinfectant solutions are provided in each corridor at the **COVID station** (see floor maps below). **Do not use the surface or hand disinfectant solution on the PC screen.** Gently clean the screen with a cloth moistened with water and soap.

Although the use of gloves for the researcher is mandatory, **hand disinfectant solution** must be used **each time the researcher has to take off the gloves** for needs related to the procedure of the experiment, before wearing new gloves.

A **small container** dedicated to waste possibly contaminated by SARS-CoV-2 (i.e., gloves or tissue papers) is present in each room. **The container must be emptied at the end of the experimental session.** A **yellow container for biological waste** is placed in each corridor (see floor maps below). Please, remember that the container is intended **exclusively** for the containment of **waste potentially contaminated by Coronavirus**, such as **tissue papers, masks** and **gloves**. Disposal of common waste is prohibited in these bins.

Any sheets of paper touched by the participants (i.e., informed consent and questionnaires) must be stored for at least two days in the dedicated drawer that you can find in each room. After this period, the sheets must be removed.

For **experiment lasting more than 1 hour**, a **15/20 minutes break every hour** must be ensured in order to ventilate the room. During the breaks, researchers and participants can wait in the waiting areas (see below), in the third floor balcony or in the park. Please, remember to keep the moving inside the School to a minimum and avoid letting the participant moving alone. Please, read the SISSA's regulation (see: <https://www.sissa.it/news/access-sissa-phase-2>) and follow the general rules on social distancing, hand washing, correct use of masks and disinfection of environments.

Specific indications - EEG

Specific guidelines for caps and electrodes disinfection are provided in the room (see also Appendix A). Please, pay attention to disinfect the materials used to clean cap and the electrodes (i.e., the bowl and the small brushes) and the tape measure for measuring the participant's head size. **Surface disinfectant solutions** are provided in each corridor at the **COVID station** (see floor maps below). **Disposable towels are available** in the two EEG labs (rooms 345 and 246) and **must be used by participants**. In case **non-disposable towels** are used, they must be dried and thrown

in the **dedicated basket in the third floor corridor** for the washing. **Do not re-use non-disposable the towels before washing them.**

If the preparation of the participants require the researcher to take off the gloves (i.e., to attach external electrodes to the participant's face), the researcher must disinfect the hands with the hand disinfectant solution and put on new gloves.

Specific indications - TMS

The **surface solution** (which is based on a chlorine solution) at the COVID station is **not suitable** for disinfecting the **TMS coils**. Please, use the dedicated alcohol-based solution.

In case your experiment includes the measuring of **motor-evoked potentials** (and thus the participant cannot wear a glove as long as electrodes are attached on her or his hand), the participant must **disinfect her or his hand after removing the electrodes** with the hand disinfectant solution. As for EEG electrodes, **specific guidelines for electrodes disinfection** are provided in the room (see also Appendix B). Please, pay attention to disinfect the materials used to clean the electrodes (i.e., the bowl and the small brushes) and the tape measure for measuring the participant's head size.

During **neuronavigation** and if the weather conditions permit, **the room's windows should be kept open**, to ensure natural air circulation. The **pencil used to mark the target point** of the participant's head must be disinfecting by sharpening after the use.

Specific indications - EEG cabins and psychophysics booths

Inside the EEG **cabins** and the psychophysics **booths**, **the participant is allowed not to wear gloves** during the running of the experiments. **The participant must disinfect her or his hands during every break**, with the hand disinfectant solution provided in each lab.

Due to the limited space and air circulation in cabins and the booths, **the doors must always be kept open during the experimental session** and **the ventilation system switched off**. Furthermore, before the arrival of the participant and if the weather conditions permit, **the room's windows should be kept open**, to ensure natural air circulation. Please, keep in mind that room ventilation is particularly important in rooms with cabins or booths.

At the end of the experiment, after having sanitize the room and the cabin/booth (see the general indications above), a **one-hour break must be ensured between a participant and the next one**. During this time, **the ventilation system of the cabin/booth must be switched on at the maximum speed** and **no one can stay in the room and the cabin/booth**.

Support researcher

The presence of a third person (support researcher) in the laboratory is allowed for the necessary time (i.e., to help the researcher with the EEG cap or to explain the task to the participant). She or he must wear the surgical mask (or the FFP2 and the facial shield if the type of interaction requires them) and gloves.

Personal Protective Equipment (PPE)

Dedicated PPE must be used inside the laboratory during the entire duration of your stay (i.e., during the experimental sessions or the alone work). Furthermore, it is mandatory to take all the hygienic precautions possible, especially with respect to keeping hands clean. **Hand sanitizers** are provided and **visibly placed in each laboratory corridor (COVID station; see floor maps below)**, and must be used especially at the beginning and the end of each experimental session.

PPE for researcher and support researcher

- surgical mask
- gloves
- lab coat

A **FFP2 mask** and a **facial shield** must be worn when the **interaction** with the participant lasts **> 15 minutes** and at an interpersonal distance **< 1 meter (i.e., EEG or TMS experiments)**.

The **FFP2 mask** is provided by **Marco Zanon** (room 233; mzanon@sissa.it) and should be collected a few days before the experimental session.

Facial shields are available in rooms 345 (2 shields), 346 (2 shield), and 246 (2 shields). The facial shields in the labs **can be used multiple times**, so once you finish to use them, please **disinfect them and leave them in the lab**. Please, write to Marco Zanon (mzanon@sissa.it) for additional shields.

Lab coats are provided by the **Health and Safety Service** (room 422; safety@sissa.it). Lab coats are **personal** and must **be collected the first time you access to SISSA**. A **coat rack** is placed at the entrance of the lab corridors at the second and third floor. A **washing service** is available at SISSA. A **basket for coats to be washed** and a **table for washed coats** are present at the third floor corridor (**lab coat collecting point**; see floor maps below). You must write your name, surname, and group tag on your lab coat in order to be recognizable. Each group must choose a group tag (i.e., PI's initials or group acronym) that is univocal and not confusing with that of the other neuroscience groups.

PPE for participants:

- surgical mask
- gloves

Waiting areas and bathroom for externals only

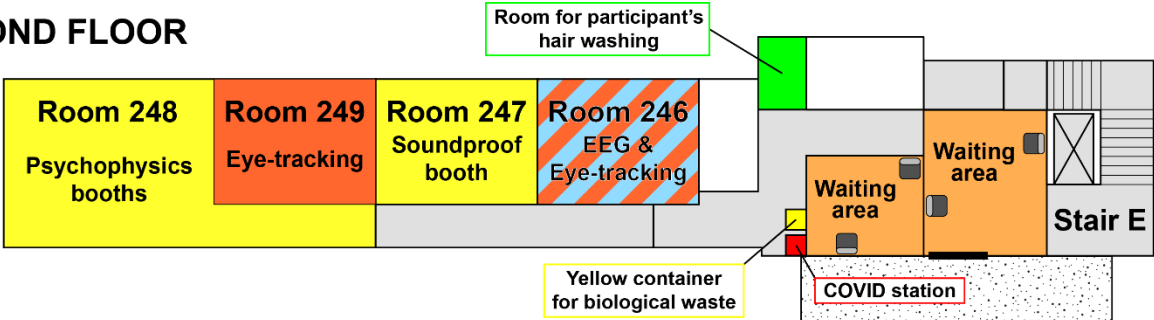
Three waiting areas (see floor maps below) are available for external participants who have to wait for starting the experiment or take a break between one experimental session and the following. **The researchers are in charge of disinfecting the seat** with the surface disinfectant solution provided at the COVID station, **as soon as her/his participant leaves the seat**. The researchers and the participants can also stay in the third floor balcony or in the park. Please, remember to keep the moving inside the School to a minimum and avoid letting the participant moving alone. Please, read the SISSA's regulation (see: <https://www.sissa.it/news/access-sissa-phase-2>) and follow the general rules on social distancing, hand washing, correct use of masks and disinfection of environments.

External participants are not allowed to use the same bathrooms of SISSA workers for physiological needs. A **bathroom for external people only** is available at the **third floor** (right wing, main building; see floor maps below). This bathroom can also be used by external participants **to wash their hair** after an EEG experiment in the third floor EEG room (room 345).

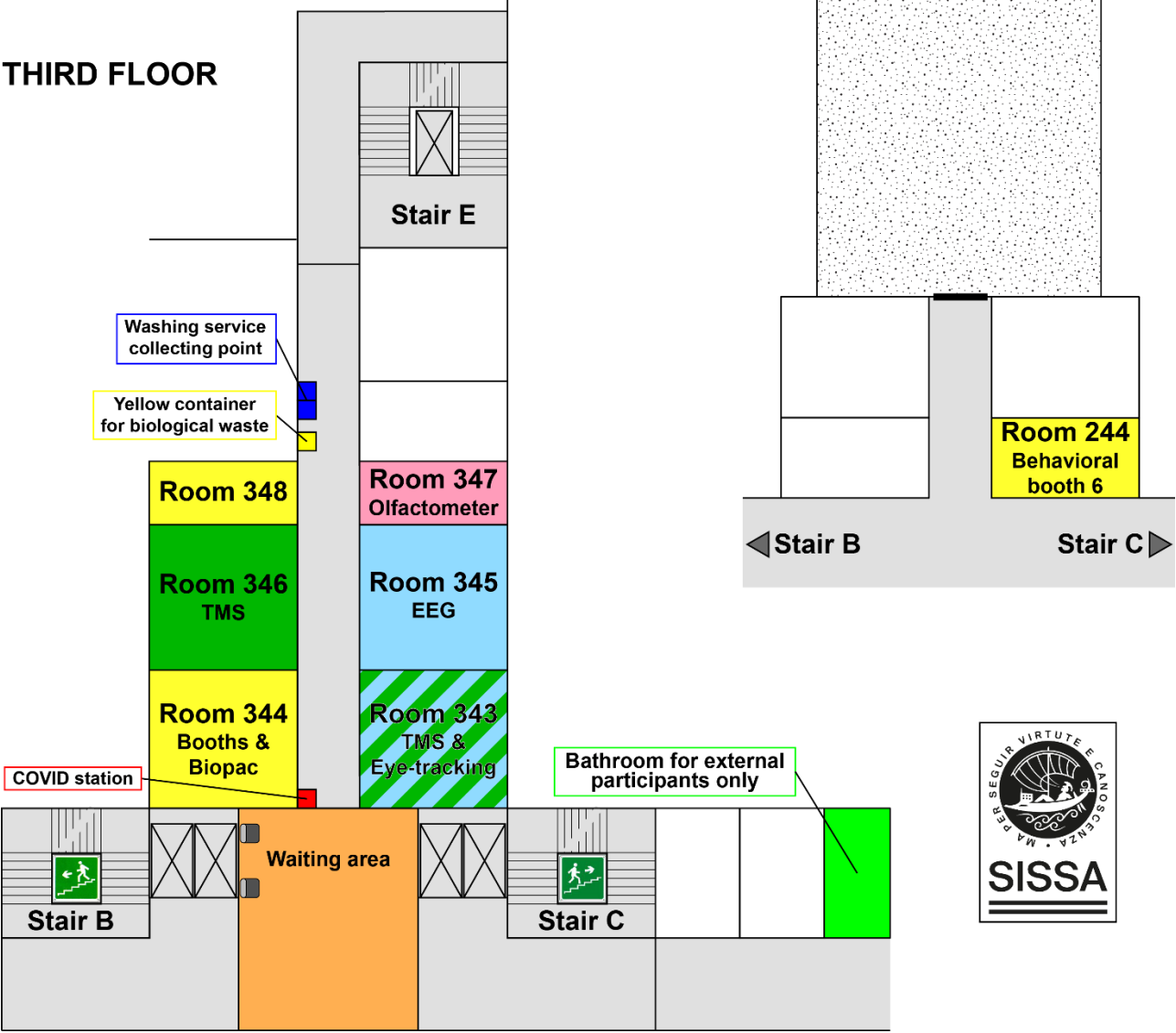
At the second floor, a room is dedicated to participants who carried out an **EEG experiment** in the second floor EEG room (room 246) for **washing their hair**.

External participants can use any bathroom to wash their hands.

SECOND FLOOR



THIRD FLOOR



APPENDIX A

EEG ELECTRODES AND CAPS - CLEANING AND DISINFECTION

The guideline illustrates how to clean and disinfect the EEG electrodes and the cap before using them on a new participant or storing.

Five rules of thumb:

- 1) **Do not kink the electrode wires.** Especially where the wire exits the electrode housing.
- 2) **Clean electrodes softly immediately after use** (when the gel is still soft) by hand with **warm water.**
- 3) **Do not use aggressive soaps and do not let the electrodes touch any kind of metals.**
- 4) **Do not pull-out the electrodes at the flat cable** (grab the electrodes at the casing).
- 5) **Do not let water or gel enter the connector.**

Procedure

1. Disconnect the electrode bundles from the amplifier and remove the cap from the participant's head.
 2. Use **warm tap water (up to 50 °C)** to rinse off the gel from the cap and the electrodes (make sure to keep the connector dry). Warm water will dissolve the gel quickly. Use a **toothbrush and/or a small soft brush to gently remove gel residues** from the electrode holders on the cap or the electrodes tips. Only use a soft brush for removing residues to avoid damages.
 3. Fill a plastic bowl with **warm water (up to 50 °C)** and **hand soap** (about a teaspoon). **Do not use hot or boiling water** and **do not use a metal bowl** as this can cause damage to the sensitive electrodes.
 4. Place the electrodes and the cap in the water bath and let it **soak for approx. 10 minutes.**
 5. **Softly dry** the electrodes and the cap with hand paper.
 6. **To disinfect, fill the plastic bowl with the alcohol solution** (~20 % ethyl alcohol; in the wash bottle) and **soak** the electrodes and the cap for **approx. 1 minute.**
Do not throw the alcohol solution in the sink. It can be reused 5-6 times.
 7. **Rinse thoroughly** with warm water after disinfection.
 8. Remove the excess of water by softly drying the electrodes and the cap with hand paper.
- Put them onto a clean towel in the EEG lab** and let them dry.

Adapted from the Biosemi ActiveTwo user manual (version 3.2)

APPENDIX B

EMG ELECTRODES - CLEANING AND DISINFECTION

The guideline illustrates how to clean and disinfect the EMG electrodes before using them on a new participant or storing.

Procedure

1. Disconnect the electrodes from the amplifier.
2. Use **warm tap water (up to 50 °C)** to rinse off the gel from the electrodes (make sure to keep the connector dry). Warm water will dissolve the gel quickly. Use a **toothbrush and/or a small soft brush to gently remove gel residues** from the electrodes. Only use a soft brush for removing residues to avoid damages.
3. **To disinfect**, use the alcohol solution (~75 % ethyl alcohol) for TMS coil in the wash bottle.
4. **Rinse thoroughly** with warm water after disinfection.
5. Remove the excess of water by softly drying the electrodes with hand paper.
6. Let them dry before storing.