



Specific Safety Regulations for the X-ray lab at the Division of Synchrotron Radiation Research (in room B048 in the Astronomy building at Lund University)

Exposure to X-rays may cause serious harm, such as cancer, and should therefore be avoided as far as possible. The walls and doors of the lab are designed to stop any harmful X-rays, but it is crucial to make sure that nobody is in the X-ray lab when the radiation is on. For this, the lab is equipped with an interlock system, which makes it impossible to turn on the radiation when the doors are open and turns off the radiation immediately if any door would be opened. Still it is possible to turn on the radiation when somebody is in the room. In order to avoid this, always follow the following steps.

1. Always keep the door between the lab and the control room open if there is somebody in the lab.
2. Before activating the interlock system, take an extra look either through the door or on the camera screen and make sure that there is nobody in the lab.

In case you are in the lab when the door is closed and/or the radiation is turned on:

3. Do not panic. The radiation level is very low as long as you are not in the direct X-ray beam.
4. Shout to the people in the control room to turn off the radiation.
5. Avoiding the direct beam, locate and press one of the emergency-stop buttons or open a door to automatically turn off the radiation.

There are also warning signs outside each door, shining with red light if the interlock system is activated and the beam is or can be turned on, and with green light otherwise. Inside the lab, there is a light shining yellow if the source is on but the shutter is close, meaning that it is safe to be in the lab, and red when the beam is on and the shutter is open.

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Johan Gustafson
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Safety training for using the X-ray lab in room B048 in the Astronomy building at Lund University

This is to make sure that you have read and registered the rules.

How do you make sure that nobody is in the lab before you activate the interlock system and turn on the beam?

1.

2.

What do you do if you are in the room when the radiation is turned on?

3.

4.

5.

I hereby declare that I will adhere to the safety procedures above. I also accept that a record of me is kept in the database of users of the X-ray lab. To be removed from this database, contact Johan Gustafson (johan.gustafson@sljus.lu.se) or the head of the Division of Synchrotron Radiation Research.

Signature/ Name in block letters

Date

I have reviewed the safety training of the above user of the X-ray lab.

Signature/ Name in block letters

Date