Impact of the COVID-19 pandemic on the operation of the European XFEL

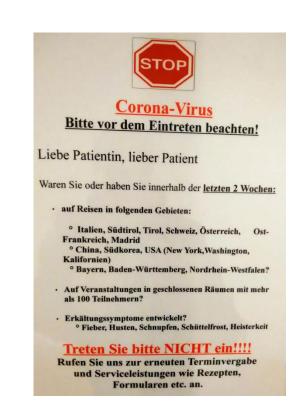


Robert Feidenhans'l

9 June 2020 Video Conference



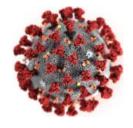




2020 Looked really good: All six Instruments are in Users Operation



COVID-19 spread and impact on European XFEL operation



Start of COVID-19 spread in Hamburg area





COVID-19 reduced Operation

- European XFEL went by 16 March into a reduced operation with minimal staff on site
 - The facility stayed open for business.
 - Extended use of home office is applied with the purpose to complete already existing tasks that have not yet been completed
 - This includes for instance
 - ► Research output such as data analysis resulting in peer-reviewed publications
 - ► Improvements to an instrument, data chain, or workflow that result in improved operation and efficiency in the future, when the instrument returns to operation
- Restart with 30% staff on site started 4 May



- European XFEL and DESY decided to set the accelerator in a safe (deep shutdown) state, i.e. they pose no risk to personnel or public and can be left without control room personnel by 21 March
 - Restart will take at least 4–6 weeks from the beginning of the restart to fully operational state
 - X-ray delivery end of July after the summer shutdown
 - No **regular** user opereration this year
- The user experiments planned in the current Run 5 (spring 2020) at the earliest will be rescheduled during the time reserved for Run 6 (fall 2020) depending on the restart of the accelerator
 - Run 6 is postponed to the beamtime scheduled in spring 2021
 - The call for proposals in June 2020 was cancelled
 - The next call for proposal is planned for November 2020 for Run 7 in the fall 2021

Phase 3: European XFEL Facility Restart Scenario, start 4 May 2020

- **Telecommuting** stays default working mode whenever possible
- **Start of selected activities** at the premises planned and coordinated by Group Leaders
- Work at "priority areas":
 - Workshop
 - Laboratories in XHQ-E0
 - Startup and operation of instruments and lasers
 - Planned modifications in the XTDs
 - Startup of beam transports
- Staffing level on site kept below 30% until further notice

Work to do: How to fold in user operation?

- COVID-19 Safety Guidelines and training for work on site provided
 - Increased hygiene and distancing measures in place
 - Occupancy restrictions for all European XFEL rooms
 - ► Only 1 person per office
 - ► Maximum occupancy given at door
 - ► Includes experiment hutches
- Staff members only allowed on site with permission of Group Leader
- Access of externals allowed when coordinated with respective European XFEL contact person

FEL.EU SR-2020-002-01.0

SAFETY REGULATION

Hygiene Guidelines for Safe Operation During the COVID-19 Epidemic

April 2020



X-Ray Free-Electron Laser Facility GmbH Holzkoppel 4





Long-term planning – Back to European XFEL Facility regular operation



- Phase 1
- Phase 2
- **-**
- Phase 3
- \rightarrow

50% staff on site again

All staff on site again

Dates for continued restarting activates to be determined based on official regulations and our possibilities to secure safety of European XFEL staff members on site!

Full user operation

- No regular user operation in 2020 (expected start in 2021)
 - Experience with how to do experiments will be gained after the summer
 - Focus on commissioning and in-house research
 - Some users might be able to come on site
 - 1-3 user experiments per instruments in the fall
 - Next regular call for proposals late fall
 - Special COVID-19 related call for proposals

The accelerator was restarted in May after a deep shutdown

- We are now in the regular summer shutdown and interlock test.
- The last 2 weeks the South branch (SASE2) was operated for studies. During these studies the typical performance of SASE2 @ 9keV was reached!
- The North branch (SASE 1, SASE 3) was not restarted in order to be able to finish the shutdown program under Covid 19 conditions up to mid-June
- From the point of the accelerator, we are almost in the conditions according to the initial planning of 2020.
- It looks good!

wk45 wk46 wk47 Mo Tu We We Th 16.5G 16.5G 16.5G 16.5G 16.5G 16.5G 16.5G 16.5G Nov wk50 wk52 We Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Tu We Th Dec wk2 wk3 Tu We Th Mo Tu Th Fr Jan 2021

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Thank you for your attention































Stefano Bonetti





























