

Life as a European XFEL User



Silvia Bertini
Head, European XFEL User Office

Schenefeld, 23 January 2017

Outline

- Part I – How to become an active user at European XFEL
 - Proposal submission, proposal form, review system...
 - Specific approach in early user operation: community proposals
- Part II – Insight into the life of a typical European XFEL user, especially before and during experiments (as seen live in first early user experiments!)
 - Practical arrangements for users and
 - Related procedures



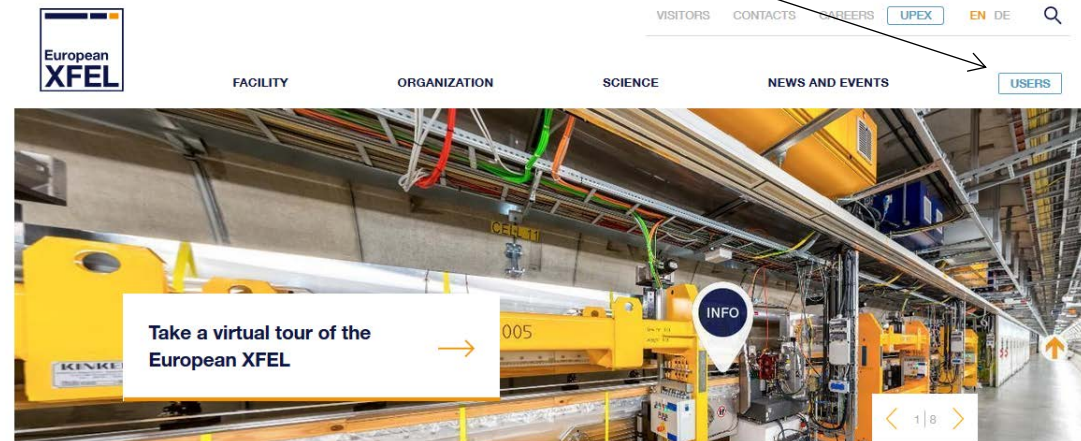
Part I



How to become an active user at European XFEL

User Access via Calls for Proposals (only)

- Early user experiments: first (peer-reviewed) calls for proposals linked to gradual start of operation of instruments (may also concern shorter allocation periods to follow up with the development of the facility more flexibly)
- Proposal submission via [User Portal to the European XFEL \(UPEX\)](#) before the deadline!
- Sources of information on open calls, links etc.: www.xfel.eu/users



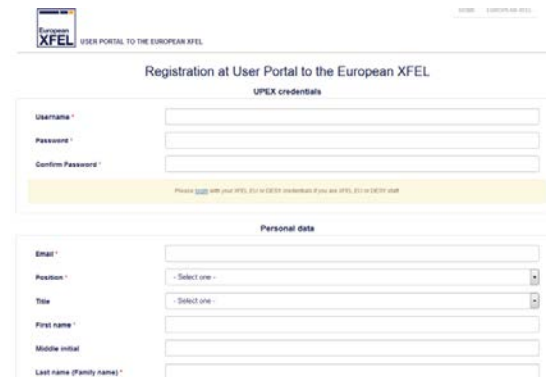
User Access via Calls for Proposals (only)

- **IMPORTANT: Well before submitting a proposal (even before a call is open), users should contact instrument scientists to get detailed information on what will be possible at which stage!**
- Plan for steady operation (from 2019 on): 2 calls / year in 6-month cycles
- Following the current rules, this path applies also to PRIORITY BEAMTIME IN THE FRAME OF USER CONSORTIA



Experiment Proposal Submission

- Proposal submission only through UPEX (User Portal to the European XFEL): <https://in.xfel.eu/upex>
- **All scientists appearing on a proposal and/or later joining an experiment team need an account in UPEX!**
- As soon as the call is open
 - Please proceed with setting up your **UPEX accounts** (Main proposers, Principal Investigator, and all other co-proposers)
 - Or accept **latest policies** if you have already an account! (Sorry!)
 - Please submit your proposals **as early as possible** in order to avoid overloading UPEX before the deadline! ;-)



The screenshot shows the registration page for the User Portal to the European XFEL. The page title is "Registration at User Portal to the European XFEL". Below the title, there are two main sections: "UPEX credentials" and "Personal data".

UPEX credentials

- Username *
- Password *
- Confirm Password *

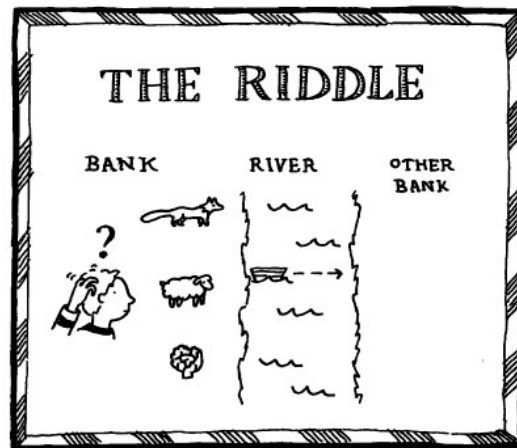
Please click on your XFEL ID to create credentials if you are XFEL ID holder

Personal data

- Email *
- Position *
- Title *
- First name *
- Middle initial *
- Last name (family name) *

European XFEL Proposal Form concept

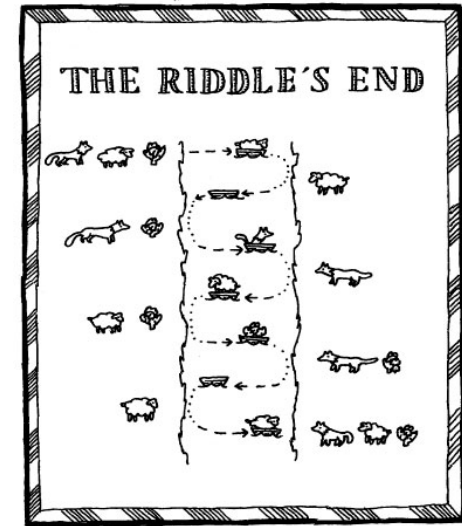
- Concept should help to comply with the **complex framework requirements**: detailed information needed for planning so as to speed up 'proposal to experiment' process (→ **single-step**)
 - **Proposal to contain ALL information needed for scheduling, for ALL resources (labs!!!)**
- One standard form for all scientific instruments!
- Many questions = more work for users and for us, too, but **“guided” approach to good-quality proposals** (ideally even by 'new' users)
- Possibly impact on number of proposals submitted? (warning to our funding agencies...)



Picture by JESSICA AHLBERG from THE BOY, THE WOLF, THE SHEEP AND THE LETTUCE

A Little Search for Truth* by ALLAN AHLBERG

European XFEL Proposal Form sections



Current Sections in Standard Proposal Form:

- General part (incl. **experiment description**)
 - ▶ Experiment description information should be consistent with the parameters indicated in specific fields below (needed for parallel operation plans)
- Sample/substance sheet(s) (**MSDS**) – for **all** samples / substances to be used (detector calibration samples at this stage if needed!)
- Beam properties and instrument configuration
- Resources (other instrumentation: optical lasers, detectors,... please **always clarify with instrument scientists well in advance**) provided by European XFEL or user-supplied (this one not ideal for early experiments...)
- User lab access / bench space request – for **all** user labs

Picture by JESSICA AHLBERG from THE BOY, THE WOLF, THE SHEEP AND THE LETTUCE

A Little Search for Truth* by ALLAN AHLBERG

Peer-review process

- Peer-reviewed allocation - **one review committee per instrument** (assessment of this organization by SAC after first 2 years): aim at transparency and efficiency, avoid pro-rata scheme
- Emphasis on **scientific merit** = main criterion from the start - in consideration of **feasibility (early experiments!) and safety**
- **PRP Terms of Reference** include the general rules of functioning of the review bodies and a section about good scientific practice!



Priority Beamtime for UC users

- Details for HIBEF User Consortium Agreement not finalized at present – however a share of priority beamtime for *this UC is planned, proportional to financial effort*
- *General basic rules following the guidelines set by XFEL.EU Council in 2011 and 2015:*
 - *Submission:*
 - ▶ Proposals to be submitted in an open call mandatory for priority beamtime, too!
 - ▶ Submission of proposals for priority access beam time requires (prior) approval by the UC (=> communication XFEL.EU Management / User Office with UC management)
 - ▶ Specific field in proposal form regarding UC membership (depends on instrument selected – UC priority BT applies only to instrument related to the contribution)
 - Review process
 - ▶ Priority BT proposals checked for technical feasibility and safety aspects as all other proposals
 - ▶ Peer-review step to establish that the proposals are scientifically sound and correspond to a worthwhile use of the allocated beam time (present approach TBC: evaluation but no grades as for other proposals)



Beamtime allocation – outcome?

- **Invitations** are issued **after the dates of experiments have been planned** (particularly crucial for parallel operation of instruments in the future) – virtually no flexibility
- **We are aware that some experiments may need a longer notice than others to cope with preparations (> 3 months after notification of successful application) (see specific field in proposal form)**
- Invitations to successful proposers / outcome information about 3-4 months from call opening / 3 months before start of allocation period
- The first call(s) will be a **test bench** for all of the above!



Consider submitting community proposals!

- Early User Workshops for SASE1 encouraged large collaborative proposals with respect to methods – very successful in life sciences on SPB/SFX - possible option for other instruments?
- Advantages:
 - more efficient use of beamtime,
 - higher chances for access
 - better conditions for ‚user operation learning phase‘
 - more chances for interdisciplinary approach for many aspects of the experiments
 - experience for ‚group-based‘ proposals later (which are not excluded by community proposals at earlier stage either)
- Drawbacks:
 - data are shared ;-)
 - more effort for preparations/coordination/experiment plan
 - each experiment hutch does not fit more than 10 users at a time in addition to staff...
- **We are not afraid of large user groups!**
 - In principle: limited hutch space is not a bottleneck, in the last run we hosted 3 successful community proposals with 80-90 participants (now some projects have even 100 users accessing data...) – challenging but possible!

Part II



Insight into the life of a typical European XFEL user (before / during experiments)

Things to do **before** you come to Schenefeld (1)

- Good to know: European XFEL uses computing infrastructure maintained by DESY. Different agreements are in place for these services.
- If you are a registered participants for an experiment you will **receive credentials for your Campus account for our computing infrastructure** (different than UPEX lightweight account!!!, unless you are XFEL/DESY staff). The temporary password will have to be changed within a few days: please do not ignore this request!
- You will need these Campus credentials for online safety training, access to experiment data and scientific software.
- Take **the online user general safety training in the ILIAS system (not in UPEX for now!)** ASAP by using these Campus account credentials. When training concluded, print, sign and scan the certificate and email it to the specific email given in the instructions.
- DO NOT WAIT until you are in Schenefeld to contact the User Office if you experience problems with the above! This saves precious time in the preparations for your beamtime on site!



LOGIN TO ILIAS

Username *

Password *

* Required

Login

Things to do **before** you come to Schenefeld (2)

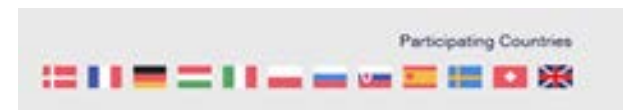
- In case you do not know already: shipping samples and equipment from outside the European Union requires more formalities and customs clearance.
- It is easy to make mistakes (even using the major express shipping companies): international logistics issues are quite complex – resulting in parcels stuck at customs and time-consuming efforts to get them on site in time for beamtime
- **Please take advice from the logistics experts in your organization well before you ship material to XFEL.EU - so as to chose the most appropriate correct export procedure from the start (cannot be changed later)**
- Shipping rules @ XFEL.EU: please refer to user guide on the web (system in evolution WRT infrastructure available)

Services can you expect as a participant in experiments at our facility in 2018-2019

- Operation in parallel to construction: this will also concern the infrastructure, too, throughout 2019!
- Temporary procedures to bridge the gaps until the picture is complete, but also some sound basis to build on for the next ~ 20 years!
 - Travel funding
 - Accommodation assistance (until guest house is up and running)
 - Food options
 - Transportation
 - Temporary office space and lockers for users

User Travel Funding

- Use of beam for users selected on the basis of scientific merit of their project is free!
- In addition, funding available to max 6 users affiliated to XFEL.EU participating countries (travel, accommodation & subsistence) – rules are available on www.xfel.eu/users/user_guide/funded_user_travel
- Users affiliated to non-shareholder countries: at present not funded, limited funds may be available for specific cases (EU TNA CALIPSOplus)
- Assistance for travel arrangements offered to funded users by our Travel Office
- Travel funding does not apply to participants in UC priority beamtime experiments – could apply to same users if affiliated to organization in XFEL.EU countries in ‘standard access’ system



Accommodation during beamtime

- Currently no accommodation on site: User Office assists all users in reserving accommodation in hotels in the Schenefeld/Hamburg area on request (although there may be bottlenecks – Hamburg is a major tourist destination in Germany)
- 59-room **guesthouse** will be built on the southern part of the campus (planned operation early 2019) – operations within the User Office (we hope to be able to decrease our dependency on local hotels...)
- Guest House coordinator recruited recently to ensure smooth (fast) transition from construction to operation phase!



Food Options

- No real replacement for canteen but helpful for users, too:
 - Currently regular daily food truck system in place for staff, visitors and USERS
 - Collaboration with local restaurants and neighbouring canteens
 - Bakery service Mon-Fri 07:00 to 13:00 (in addition to vending machines in main building)

- European XFEL Canteen:
 - Operation planned to start in early 2019
 - About 150 dining spaces, east of the entry plaza of the headquarters in the front area of the campus

- Picture courtesy of Blunck + Morgen Architekten / European XFEL



Transportation to/from campus

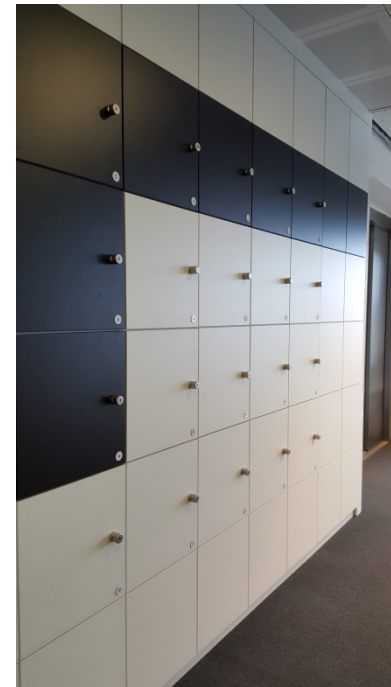
- Bus transportation: constant general efforts in the facility (Management, PR group, Works Council) to make aware politicians and public transportation company about the difficult situation especially concerning transportation off working hours and connections to town/airport/train station
- Some hope: the timetable of buses connecting the Schenefeld campus slightly extended recently to midnight on working days
- Alternative for local transportation in spring/summer/early autumn beamtime:



We have a number of bikes reserved for users (probably not enough....) - but no bike helmets!

Temporary office space for users

- Desks in the XHQ building (some with computers) and lockers for personal belongings
- Many thanks: Technical Services and ITDM



Who is who in the XFEL.EU User Office...

■ User Office group

■ User Office - administration

■ Gabriela Heessel, Kristina Ivicic, Giulia Quondam

■ Travel Office

■ Tea Larsson, Halimah Shie

■ Guest House coordination

■ Sven Heberling

■ Head of Group

■ Silvia Bertini

■ UPEX team @ITDM

■ Illia Derevianko (lead programmer)

■ Maurizio Manetti

■ In addition to Luis Maia and Krzysztof Wrona (Group Leader)

