



Elettra
Sincrotrone
Trieste

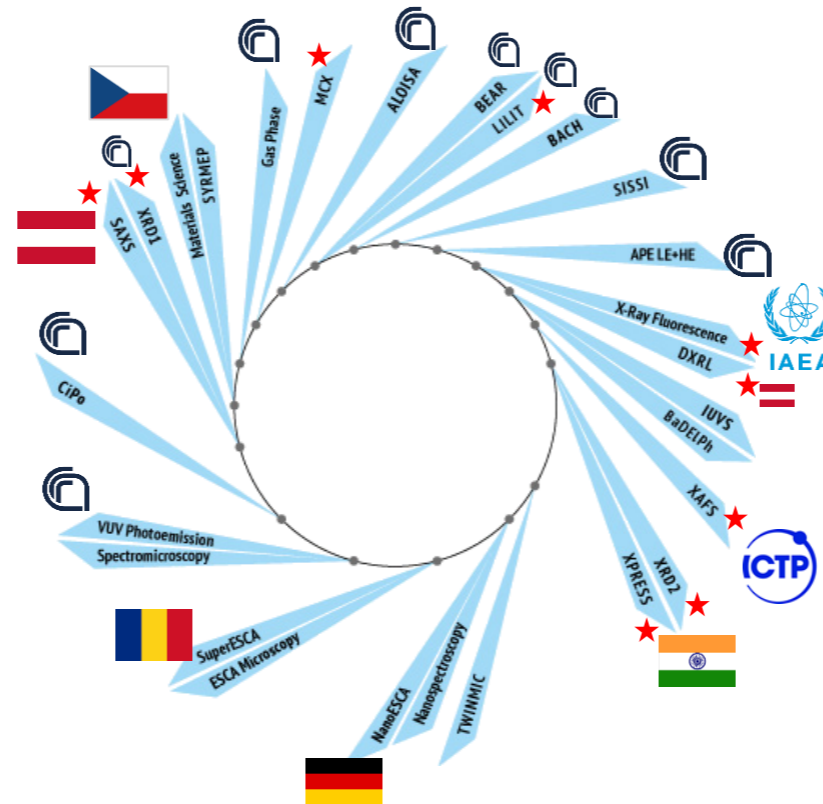
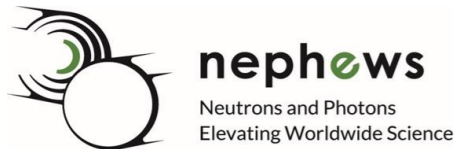
Tips and tricks for successful proposals

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ACADEMIC RESEARCH

Free access to national and international users, granted through international peer-review process



INDUSTRIAL RESEARCH

Direct access through Industrial Liaison Office (ILO)

We provide:

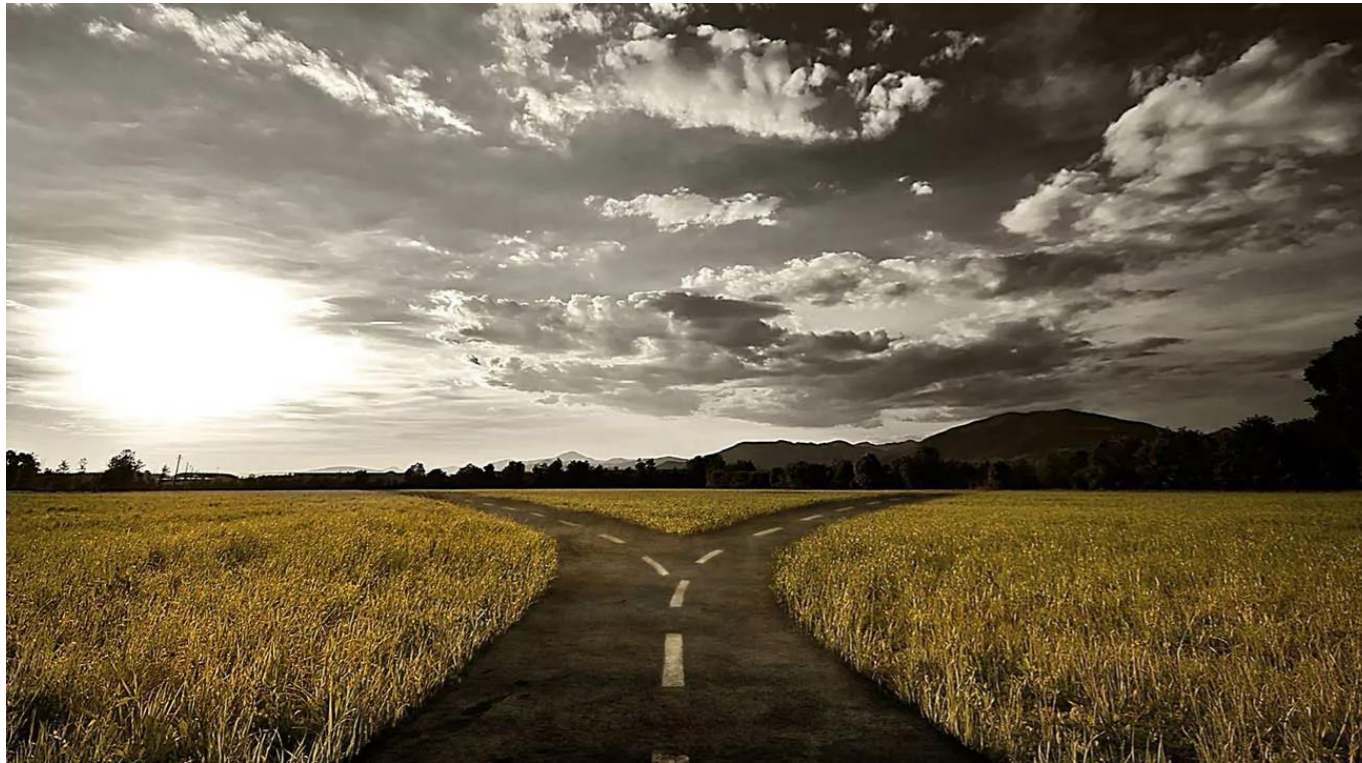
- Analytical measurements
- Co-development of instrumentation, industrial production protocols and procedures
- Consultancy

Confidentiality guaranteed (NDA)

Fee based on cost recovery or specific funding programs

Academic researchers are requested to **publish their scientific results** in the literature

Two calls per year (mid March, mid September)



Normal proposals

- Beamtime allocated during the semester after the call for proposals

Long term proposals

- Allocation over 2 years (4-semesters)
- No need to submit new proposals relating to the project every 6 months; but report after the 1st year
- **complex equipment** (time-consuming to assemble and dismount) transferred to Elettra for the project. During the two-year period, the instrument will be available also to other users



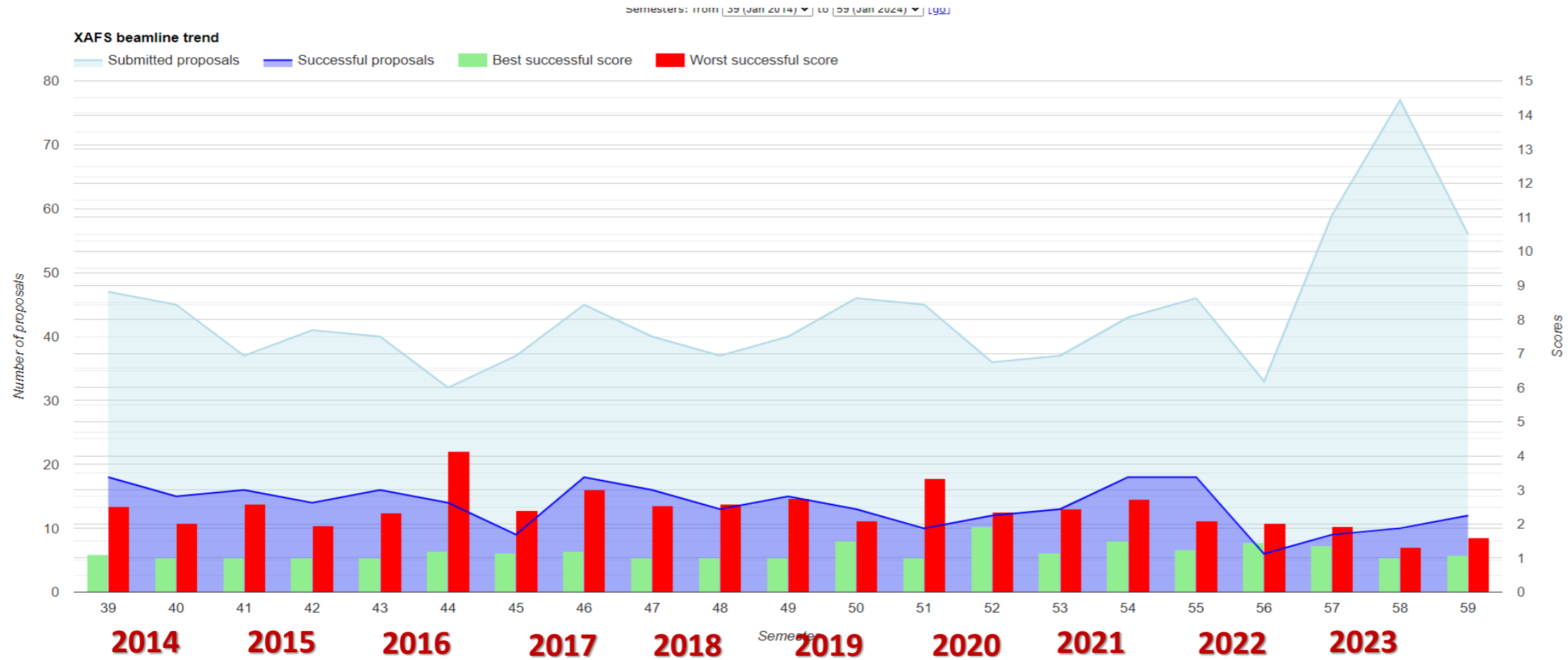
**High competition:
chance of success = 50%
(on average)**





Success rate @ XAFS

But for some beamlines the success rate can be even lower!
On XAFS, only 30% of proposal is scheduled



Writing good proposal is crucial!

- A good research topic is essential...
- ...but it is not enough: you have to **convince** the reviewers

Proposals must be scientifically compelling and competitive

- Very **few** proposals are rejected for technical reasons
- Almost all submitted proposals **could be done** with useful results but consider the difference among the following:
 - *Could they be done?*
 - *Should they be done?*
 - *Must they be done?*
- The proposals must be clearly highlight the benefit obtained from **synchrotron** techniques
- Strong scientific case where SR would allow a field to significantly advance

Lots of proposals

- reviewers have many proposals to review and discuss
- proposal must be **self-contained**
- all important information should be given in the proposal
- reviewers don't necessarily have time to get extra information from references
- poorly written proposals (typos, errors, non-respect of template and format) are likely to have a poor grade
- structure is key: **clear** and **easy to read**



The screenshot shows the VUO - Virtual Unified Office website. The URL in the browser is <https://vuo.elettra.trieste.it/pls/vuo/guest.startup>. The page features several sections:

- Login:** Includes fields for Username and Password, and a [Login] button. A note indicates that the username should be the identification code (USER ID) or your e-mail, and the password is the same as used for the e-mail system Marconi.
- Registration:** A note says "If you are a new user select this link and go on with your registration. You will receive as soon as possible an identification code and a password." The phrase "new user select this link" is circled in red.
- Strategic committee agenda:** Shows the year planning of the Strategic Committee (Restricted access).
- Resource booking:** Shows the calendar of the usage of the meeting rooms of the Elettra site. To book an event, users must login in the VUO using username and password as indicated in the «Login» section.
- Calendar:** For details on Beamtime Allocation Calendar, users should look to Elettra or FERMI Calendars.
- Seminars:** Lists forthcoming seminars at Elettra and TASC.
- Elettra Library:** Search for Books & CDs in the Elettra Library.
- Publication Search & Submission:** Please note that all publications resulting from measurement runs or research done at Elettra must be entered into the Elettra Publication Database. Authors are invited to complete the Elettra Publication Search and Submission Form online for each contribution.
- Frequently Asked Questions:** In case of problems or malfunctions, check first if you are using a correct version of the browser (Mozilla 1.0, Netscape 6 or Internet Explorer 4.0).

Your proposals

[Submit](#) a proposal for Protein Crystallography ([more info](#))

Proposal for Protein Crystallography [still in editing](#)

[Submit](#) a proposal

[Re-submit](#) a proposal

[Edit](#) a partially complete proposal

[Already submitted](#) proposals

[BEST](#) (BEam time SaTisfaction)

[Achievements](#) on a past proposal.

A brief textual report of the experiment results. This information is necessary for EU supported proposals and also to submit the "Experimental report"

[Experimental report](#) on a past proposal.

More detailed information about experiment results in rtf/pdf formats. (This report will be used for evaluating future proposals)



General information - 1

Add Proposal

Proposal Title

Like the title of a paper

Proposal Objectives *(min 30 characters)*
max 400 characters

- ≈ abstract of scientific paper
- clear statement on essence of proposal
- reviewers should understand exactly what the proposal is about from this;
- details are given in the following sections

Proposal Category

For purely statistical purposes please specify if your research is done in collaboration with industrial companies

Collaboration with Industry

Check the box below if you require financial support through the ICTP-Elettra Users Programme (for scientists from developing countries)

ICTP-Elettra Users Programme Support Requested

Proposal Category

In case of continuation or resubmission please specify your Previous Proposal Number

Application Category

Motivations of Long Term request

- **New:** If you are submitting this experiment plan for the first time or it has little correlation with your previous work at Elettra
- **Continuation:** Experiment complementary/conclusive to an experiment already performed at Elettra.
- **Resubmission:** Proposal submitted in a previous call but modified or rewritten according to the suggestions of the proposal review panel.

European Union statistics information

Discipline

Specific discipline

Chemistry, Earth Sciences & Environment, Energy Engineering and Technology, Humanities, Information and Communication technologies, Life Sciences and Biotech, Materials Science, Mathematics, Physics, Social sciences



General information - 2

- Careful and informed choice
- Correct beamline (target the proposal) and correct beam time in shifts

Experimental Requirements

Beamline Required

Please specify the 'Second beamline required' only if you can ALTERNATIVELY use either the first beamline or the second one.

Alternative beamline required

Please specify the total number of shifts required (1 shift is 8 hours) If this is a Long Term proposal you have to specify the number of shifts required for this semester.

Shifts Required

Proposal Category

Please select accurately this field because the 'Research Area' determine also the scientific committee that will evaluate your proposal

Research Area

Experimental Requirements

Please specify the Electron Beam Requirements:

- Multi bunch: normal operation - high intensity
- Few bunch: special operation - low intensity only for time resolved experiment.

Electron Beam Requirements

Photon Energy (eV)

Photon Energy Resolution (eV)

Other requirements

- Atoms, molecules and plasma
- Protein and macromolecular crystallography
- Condensed matter
- electronic and magnetic structure
- Catalytic Materials/Surface science
- Instrumentation and Technological materials
- Life and Medical Sciences,
- Polymers and Soft Matters
- Scattering
- Hard Condensed Matter- Structures

[\[Save & Continue\]](#) [\[Exit without saving\]](#)



References

- Illustrate **importance** of topic by citing one or two milestone **papers** in your field
- Cite **recent** exciting **developments** in or around specific topic of proposal
- Indicate level of your research by citing **own recent, relevant** publications (with or without Elettra data)

Do not expect that reviewers will have time to read all the references: give all essential information in the proposal



Sample description

Give details about your sample, and add a safety form for every substance you intend to use, not only samples but also other substances used for transportation, stabilization, manipulation, etc.

You must complete one **Safety Form** for each chemical substance you plan to use. Not only the sample but all the used substances (for transportation, stabilization, manipulation,...). This form is **mandatory**.

A signed copy of your safety form(s) will be required only in case of allocation.

Substance	Safety Forms	Printable Format
	[Add Safety Form]	

Edit Proposal

Sample environment/treatment

Describe the environment and/or treatment the sample will be subject to during the experiment
Sample Treatment

List all the available equipment you will use for the experiment on the experimental station
Available Equipment

List all the additional equipment you need to insert in the experimental station
Additional Equipment

Indicate you requirements for special equipment or facilities to be used off-line
Offline Facilities



Safety form

- The safety form is **mandatory** (if you do not complete at least one you will not be able to submit your proposal)
- You will be given the possibility to **update your safety forms 3 weeks before the scheduled date of your experiment**, in case you need to change, delete or add new materials. An e-mail from the VUO will let you know when editing is available
- **A signed copy of your safety form(s) will be required only in case your proposal is scheduled**, you do not need to send a signed copy for the evaluation step. All signed safety forms should arrive at Elettra before your experiment starts

Sample Description

Sample(s) and chemical substance(s) to be used in this experiment

If no data sheet is available give detailed information about samples and chemical substances to be used in the experiment

Substance	<input type="text"/>
CAS registry number	<input type="text"/>
Supplier	<input type="text"/>
Chemical formula	<input type="text"/>
Physical state	<input type="text"/>
<i>If not in previous list leave blank the selection and specify here</i>	
Other physical state	<input type="text"/>
Size (in mm ³)	<input type="text"/>
Mass (in mg)	<input type="text"/>

Sample container (capillary, flat plate, pressure cell, etc.)	<input type="text"/>
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Diffraction proposals only please specify:

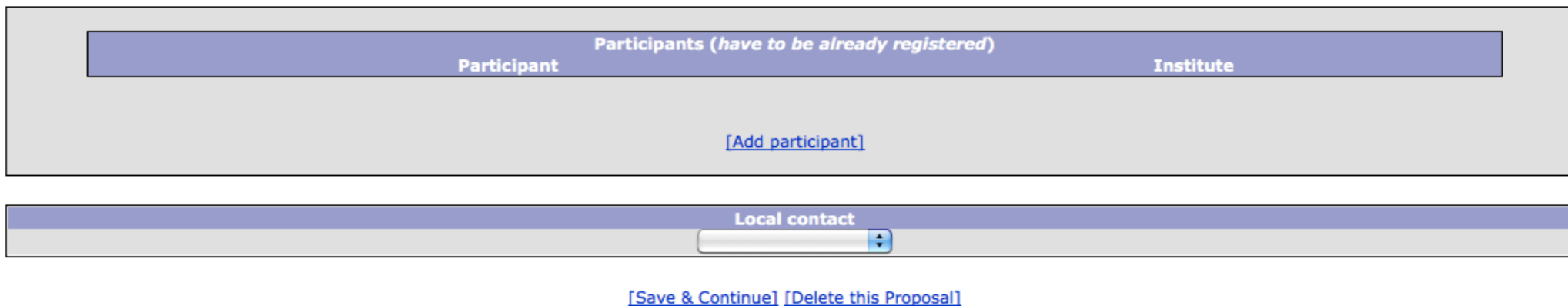
Surface area (in mm ²)	<input type="text"/>
Space group (if known)	<input type="text"/>
Unit cell dimensions at	<input type="text"/>

At the experiment the sample will be

[Save] [Cancel]

Local contact and participants

- The user completing the proposal is considered the (main) **proposer**
- All official communications will be sent to the proposer only
- No limit to the number of **participants**.
To add a participant, click on [\[Add participant\]](#) – they must be registered VUO users!
Modifications to the participant list is possible before the start of your experiment: contact the Users Office
- If you wish to include Elettra staff, ask permission first!
- The **Local contact** is the beamline scientist you interact with to prepare your proposal and who will probably assist you during your experiment. The menu will show you the options for the beamline you requested



The screenshot shows a web form with two main sections. The top section is titled "Participants (have to be already registered)" and contains a table with two columns: "Participant" and "Institute". Below the table is a blue button labeled "[Add participant]". The bottom section is titled "Local contact" and features a dropdown menu. At the very bottom of the form are two blue buttons: "[Save & Continue]" and "[Delete this Proposal]".

Two A4 pages

Times new Roman 10

-----do not change above this line-----

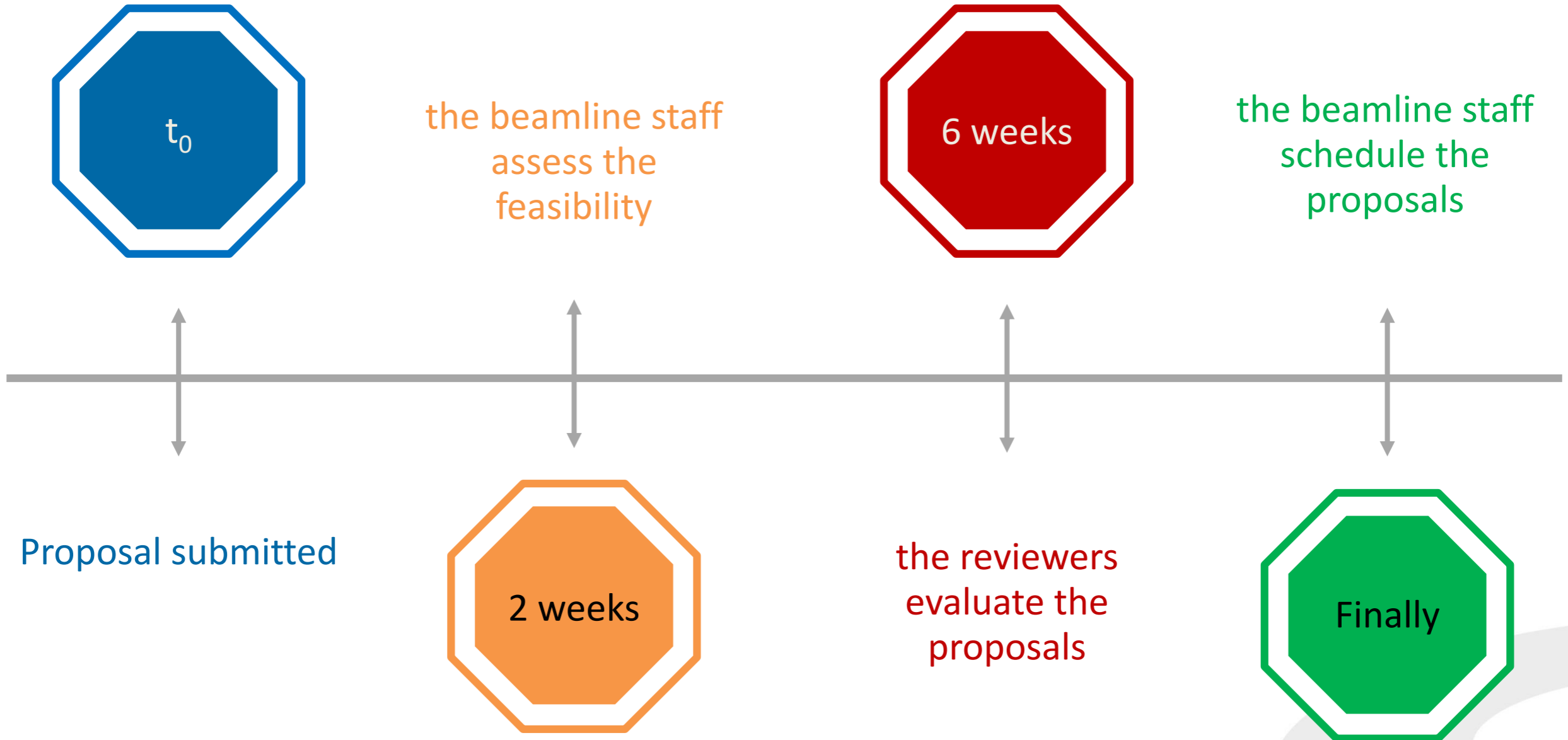
- 1. Background**
- 2. Motivation for the present proposal**
- 3. Experimental plan**
- 4. Explain why this work calls for access to Elettra or FERMI**
- 5. References**



Final steps

- Upload the file (RTF or pdf)
- Click on [Check and definitely submit this proposal](#)
or
- [Save in editing status](#) to submit later

Evaluation timeline



- 1.0 -1.5 points** Highly innovative research proposal of exceptional quality and outstanding scientific and/or practical relevance. **It must get beamtime.**
- 1.6 -2.0 points** A well-conceived and original research proposal, with strong potential for making an important contribution to an active field of research. No alternative analytical tool is available. It **should definitely** get beamtime
- 2.1 -2.5 points** Very good proposal, with a relevant scientific case and likely to produce significant results. The need for Elettra or FERMI is evident and it **should** get beamtime under normal circumstances.
- 2.6 -3.0 points** A potentially excellent proposal which is lacking some information, e.g., preliminary results, further explanations, etc. Although not groundbreaking, it is near cutting-edge and likely to produce significant results. The need for Elettra or FERMI is evident. It **may** get beamtime, unless there are too many exceptional proposals.
- 3.1 -4.0 points** Elettra or FERMI may be required and the science interesting, although in a well-worked area of research. It is of lower priority in a competitive environment. It **may** get beamtime, if the pressure on the beamline is not heavy.
- 4.1 -5.0 points** Doubts exist regarding the scientific content of the proposed project, or the scientific case is not clear, or there is no clear requirement for Elettra or FERMI. It **should not** get beamtime, unless there is no demand on that particular beamline.



After the beamtime



Through the VUO: **BEST (BEamtime SaTisfaction form)**

Achievements

- *outline of the main results of your beamtime*

Experimental report

- *2 pages*
- *Report of the experiment, what has been measured, possibly preliminary results (not a full analysis!)*

Mandatory
for the submission
of new proposals

1. Background

- **Set the scene** for the interest of your research
- Indicate fundamental and societal **importance** of your work
- Refer to any previous measurements or **preliminary characterization**
- Relevant **figures** can be useful
- Avoid vague or too broad aims
- Write in a **simple** way and be **clear**

Reviewers are expert in many different fields, but not necessarily super-experts in your own field

2. Motivation for the present proposal

- Be **specific** on what you want to do, specifying the class of samples you intend to measure
- Say **why** you are doing it
- Say **what kind of information** your measurements will give on your systems
- If you want to measure your samples at some special **conditions** (temperature, pressure, electric field,) mention it in this section and why these conditions are important
- What **results** are you expecting?
- How these results will allow to answer specific questions?
- What will be the **impact** of answering this question on your field of research and what is the importance of your study

**Just because something has not been done before
does not mean it is worth doing now**

**If there are plenty of studies of the same kind or a large plethora of results
be convincing about why you want to go in the pool
and what will be the added value of your proposal**

3. Experimental plan

- **how** you are going to carry out the **experiment** at synchrotron
- (No need to describe the recipe of how you prepare your samples)
- **How many** samples you intend to measure
- Specify the **setup** needed (furnace? Cryostat? Operando setup?)
- Be specific of the **conditions** of the measurements (e.g. temperature/pressure)
- Show reviewers you are **ready** and prepared
- Allow beamline scientists to make feasibility assessment
- Ask a **reasonable** number of beamtime shifts (**1 shift = 8 hours**)

Prior discussion with beamline scientist is strongly advised

4. Explain why this work calls for access to Elettra (or FERMI)

Specify the **characteristics of the beamline** that are essential for performing your work

- Energy resolution
- Equipment available
-

If you have **experience**, you can mention it here
(but new users are still welcome!)

If you have requested beamtime on different beamlines for the same project you can mention it here including the proposal number for the other beamline



5. References

- Illustrate importance of topic by citing one or two **milestone** papers in your field
- Cite **recent exciting** developments in or around specific topic of proposal
- Indicate level of your research by citing **your own** recent, **relevant** publications (with or without Elettra data)

**Do not expect that reviewers will have time to read all the references:
give all essential information in the proposal**

Contact beamline staff

- **In advance** (3-4 weeks before the deadline)
- To identify clearly whether and how the experiment can be done and whether it can give you the answers you need
- Advise on number of shifts required for each experiment

About the beamline staff...

- ...deals with technical feasibility
- ... **does not** evaluate the scientific merit of your proposal



Elettra
Sincrotrone
Trieste

Multitechniques proposals



Central European
Research Infrastructure
Consortium



CERIC-ERIC is an integrated multidisciplinary and multiprobe Research Infrastructure open for external basic and applied users in the fields of Materials, Biomaterials and Nanotechnology.

With a single entry point it allows to use excellent facilities in 7 European Countries.

The access is free for basic users and commercial for industrial users. Free access is by international peer review selection and open publication, industrial and/or proprietary use is at market costs.



The partners

Austria, Czech Republic, Italy, Poland, Romania, Serbia and Slovenia.

Croatia and Hungary participate as Observers pending accession.

Member States appoint one **Representing Entity** each, who has the capability to support the scientific and technical operation of CERIC-ERIC through a **Partner Facility**, complementary to all others in an overall multi-technique Infrastructure.

The facilities

Austria (Graz University of Technology) light and X-ray scattering laboratories, Austrian SAXS beamline at Elettra.

Czech Republic (Charles University Prague) surface analysis, thin film growth and studies of reaction mechanism on catalyst surfaces

Italy (Elettra Sincrotrone Trieste) XAS, XRD, imaging...

Poland (Polish Ministry of Science and Higher Education) techniques based on synchrotron radiation in the soft x-ray range

Romania (National Institute of Material Physics) HRTEM and EPR laboratories

Slovenia (National Institute of Chemistry) NMR spectroscopy

Croatia (Ruđer Bošković Institute) ion beam techniques

Hungary (Budapest neutron centre) Neutron scattering

Two calls/year

Proposals must be submitted through the CERIC Virtual Unified Office (**CERIC VUO**).

Login

Username: [\[Login\]](#)
Password:

Indicate as username your identification code (USER ID) or **your e-mail** and the password (for Sincrotrone Trieste users it is valid also the password used for the e-mail system [Marconi](#)).

and choose "**Submit a new CERIC proposal**":

Ceric submission proposals

[Submit a new Ceric proposal](#) ←
[Edit a partially complete proposal](#)
[Already submitted proposals](#)



Elettra
Sincrotrone
Trieste



<https://www.ceric-eric.eu/>



...good luck with your future proposals!