Dear MLZ User,

we like to remind you to apply for beam time at the Heinz Maier-Leibnitz Zentrum (MLZ).

Next Proposal Deadline: September 13th, 2019

Please submit your application online within your personal account to

- user.frm2.tum.de for instruments supported by TUM, Helmoltz-Zentrum Geesthacht, and MPG
- fzj.frm2.tum.de for instruments supported by Forschungszentrum Jülich

Templates for the 2-page pdf file for the scientific background can be downloaded from

mlz-garching.de/englisch/user-office/downloads-und-tools

With your personal account you can access the proposal and reporting system. The review of the proposals will take place on October 29th/ 30th, 2019. Results of the review will be available online about two weeks later.

To ensure the feasibility of the proposed experiment please contact the instrument scientist well in advance. Please find all detailed information in "Getting beam time", at

mlz-garching.de/englisch/user-office/getting-beam-time

Financial Support

Please have a look at

mlz-garching.de/englisch/user-office/your-visit-at-mlz/home-again

Please check the eligibility conditions there!



Heinz Maier-Leibnitz Zentrum Lichtenbergstr. 1 85748 Garching / Germany

User Office

Dr. Flavio Carsughi

Phone: +49 89 289 10703

Dr. Ina Lommatzsch Phone: +49 89 289 10794

Ramona Bucher

Phone: +49 89 289 11751







Instruments at the MLZ

The following instruments are available for applications:

DIFFRACTION:

BIODIFF: diffractometer for large unit cells, cold source

HEIDI: single crystal diffractometer, hot source **MIRA**: multipurpose instrument, cold source

POLI: polarized hot neutron diffractometer, hot source **RESI**: single crystal diffractometer, thermal source

SPODI: high resolution powder diffractometer, thermal source **STRESS-SPEC**: material science diffractometer, thermal source

SANS AND REFLECTOMETRY

KWS-1: small angle scattering diffractometer, cold sourceKWS-2: small angle scattering diffractometer, cold sourceKWS-3: very small angle scattering diffractometer, cold source

MARIA: magnetic reflectometer with high incident angle, cold source

NREX: reflectometer with X-ray option, cold source **REFSANS**: time-of-flight reflectometer, cold source

SANS-1: small angle scattering diffractometer, cold source

SPECTROSCOPY:

DNS: diffuse scattering spectrometer, cold source J-NSE: spin-echo spectrometer, cold source PANDA: three-axes spectrometer, cold source PUMA: three-axes spectrometer, thermal source

RESEDA: resonance spin-echo spectrometer, cold source **SPHERES**: backscattering spectrometer, cold source **TOFTOF**: time-of-flight spectrometer, cold source

TRISP: three-axes spin-echo spectrometer, thermal source

IMAGING AND ANALYSIS:

ANTARES: radiography and tomography, cold source

NECTAR: radiography and tomography, fission neutron source

PGAA: prompt gamma-activation analysis

POSITRONS:

NEPOMUC:

- positron beam ("open beam port")
- positron defect spectrometer ("Coincidence doppler broadening")
- positron life time spectroscopy ("PLEPS")

Details of these instruments can be found at mlz-garching.de/instruments

Details of the available sample environments can be found at mlz-garching.de/se



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THIN FILM LABORATORY

Access to the thin film laboratory for the sample preparation via a MBE system is offered ONLY in combination with successful proposals submitted to the reflectometers MARIA and N-REX. Users can apply for remote access (the sample is fabricated by staff scientists without the user), or collaborative access (the user fabricates the sample under the supervision of staff scientists). In order to apply for access to the thin film lab, please download the additional thin film lab proposal template from

mlz-garching.de/englisch/user-office/downloads-und-tools complete it with details of the sample to be prepared and email it to useroffice@mlz-garching.de.

The users are warmly invited to contact the scientist in charge (Dr. Sabine Puetter; s.puetter@fz-juelich.de) before submitting a combined proposal for accessing the thin film laboratory. Please find further information at mlz-garching.de/mbe

TRANSMISSION ELECTRON MICROSCOPY

Access to the Transmission Electron Microscopy is offered for soft matter investigations ONLY in combination with successful proposals submitted to any MLZ instrument. Users can apply for remote access (the sample is observed by staff scientists without the user), or collaborative access (the user observes the sample under the supervision of staff scientists). In order to apply for access to the Transmission Electron Microscopy, please download the additional TEM proposal template from

mlz-garching.de/englisch/user-office/downloads-und-tools complete it with details of the sample to be observed and email it to useroffice@mlz-garching.de.

The users are warmly invited to contact the scientist in charge (Dr. Marie-Sousai Appavou; m.s.appavou@fz-juelich.de) before submitting a combined proposal for accessing the Transmission Electron Microscopy. Please find further information at

mlz-garching.de/tem

IRRADIATION FACILITIES

In addition to beam tube experiments, irradiation facilities are available for neutron activation analysis, isotope production and silicon doping. Please contact the User Office (useroffice@mlz-garching.de) for further information.

Rapid Access Programme

A Rapid Access programme is also available at the MLZ, please check the programme details at

mlz-garching.de/englisch/user-office/getting-beam-time



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Combined Neutron/ Photon Proposals at GEMS

GEMS offers the possibility of combined neutron/photon beam time proposals: The use of the neutron instruments **REFSANS**, **SANS-1** and **STRESS-SPEC** at the MLZ can be combined with the following photon instruments at the HZG outstation at DESY at the synchrotron source PETRA III:

- > **HEMS**: diffraction and imaging at high energies
- > IBL: micro- and nanotomography
- ➤ **BioSAXS**: Small-Angle X-ray Scattering Beamline
- ➤ Nanofocus Endstation at the The Micro- and Nanofocus X-ray Scattering Beamline (nanodiffraction)

If you submitted a proposal for beamtime at one of the above mentioned instruments to the DESY-DOOR system please use the same proposal title and add the corresponding DOOR proposal number in the MLZ proposal. If you are interested in submitting a proposal for beamtime at the BioSAXS instrument please contact the GEMS instrument responsible Vasyl Haramus (vasyl.haramus@hzg.de).

More information is available on our website **gems.hzg.de**

For these proposals GEMS scientists will coordinate the two beamtimes.



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Don't forget!

Preparation of proposals

We kindly recommend to prepare the proposals with care, by including all relevant scientific as well as technical information in the template available at the page

mlz-garching.de/englisch/user-office/downloads-und-tools

Proposals not fulfilling these requirements may be penalised. Please do not hesitate to contact the proper instrument scientists for their support in this important task.

Experimental Reports

Please note that it is mandatory to submit an experimental report for any experiment performed not later than two months after the end of the experiment.

The absence of mandatory experimental reports will be checked for experiments performed after July 01st, 2017, and will influence the overall evaluation of your proposal, we warmly suggest all the users not to neglect this step.

Only experimental reports submitted to the online system by September 27th, 2019 at the latest will be considered for the review process.

Future Proposal Submission Deadline

The next deadline for proposal submission at the MLZ will be published at the MLZ User Office page

mlz-garching.de/user-office

We look forward to receiving your proposals, best regards from Garching, The MLZ User Office Team



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