

# How to Apply for Beamtime

**Bella Lake**  
*HZB, TUB*

# HFM/EXED READY FOR PROPOSALS!

HFM/EXED ready for proposals!

## Building HFM

- 7.5 year to build,
- large team involved in the construction,
- ~20M€

## Running HFM/EXED

- Large team for HFM and EXED operation
- 1M€ running cost per year
- Until december 2019

## Flagship experiments

- Require  $H > 15T$ , only possible at HFM
- Highest quality science
- Top publications

We are looking for the best ideas for the experiments from the neutron and high magnetic field community

# THE PROPOSAL SYSTEM

HFM-EXED is **accepting proposals for elastic mode (diffraction & SANS)** with beamtime allocation **starting from 2015.**

HFM-EXED proposals can be submitted **at any time** and will be peer reviewed by members of the

**HFM STAC** and

**College 5b “*Magnetism and Superconductivity (Neutrons)*”**

The proposals will be reviewed every few months

Proposals should be submitted in the normal way (via online **General Access Tool, GATE**).

But the proposal form has some **additional requirements.**

# WRITING A PROPOSAL

Login at Gate <https://www.helmholtz-berlin.de/pubbin/hzbgate>

- college 5b Magnetism and superconductivity (neutrons) & HFM/EXED

- HFM/EXED - Requirements for the High Magnetic Field Facility for Neutron Scattering

**General proposal data**

Title \*

Abstract \*  
max. 1000 characters

Proposal type \*  Scientific College \*   
[Overview of the Scientific Colleges](#)

Main research area \*  Scientific Category \*

Funding  Funding requested [Information about funding](#)

Complementary beamtime for this research project will be used at another facility \*  yes  no  
If yes, please specify the facility

**Add technical requirement**

Neutrons – Requirements for experiments at BER II  
 Photons – Requirements for experiments at BESSY II  
 MX – Requirements for macromolecular crystallography at BESSY II  
 HFM/EXED – Requirements for the High Magnetic Field Facility for Neutron Scattering

# WRITING A PROPOSAL

The proposal must be discussed with one of the local contacts, and you will be requested to name that contact

## Discussion before proposal submission

This proposal was discussed with:\*

Oleksandr Prokhnenko ▼

Feedback

received on

30th Oct 2014

Please note:

**No proposal will be accepted that has not been discussed in detail with one of the instrument scientists of HFM/EXED in advance.**

This is a necessary measure to ensure that the conditions of the proposed experiment can be realized at HFM/EXED.

# WRITING A PROPOSAL

It is necessary to show bulk property measurements  
e.g. specific heat or magnetization preferable at the fields requested.

## Sample characterization – Bulk data

### Bulk characterization

Please provide sample characterization data and their description, for example,

- (B,T)-phase diagrams
- M vs B vs T plots
- whatever else you think is relevant to characterize your sample

**Bulk data upload  
(pdf file)\***

Choose File No file chosen

previous step

next step

continue later

The sample must have been characterized by neutrons

## Sample characterization – Neutron data

### Characterization by neutron scattering

The proposal will not be accepted if the sample has not been characterized by means of neutron scattering in advance. Please provide the following information:

1. **sample quality** as checked with neutron diffraction (e.g. neutron Laue picture or powder diffraction pattern, individual rocking curves or regions of powder data, results from data fitting etc.)
2. **(hkl) – d/Q list with clearly marked regions/reflections of interest** (the ones that are going to be measured in the here proposed experiment)
3. Please state for the above indicated reflections the conditions at which they have been measured:
  - **sample size** (ideally the same sample as going to be measured at HFM/EXED);
  - **instrument and facility** where the sample has been measured;
  - **flux and wavelength** (range) of the respective instrument and the resulting **count rate**;
  - whatever else that might be relevant (e.g. **signal to noise ratio, collimation conditions**, etc.)

This information is necessary to obtain a realistic estimate for the measurement time at HFM/EXED.

Neutron data  
upload (pdf file)\*

Choose File No file chosen

# WRITING A PROPOSAL

Specify field direction

For each sample and field direction must give an experimental plan showing the temperatures and fields needed and for how long

## Sample information

Space group

Unit cell

A=  Å B=  Å C=  Å

$\alpha$ =  °  $\beta$ =  °  $\gamma$ =  °

**Orientations:** (only needed if sample type is single crystal)

Please define the different orientations that will be measured.

1. B || (hkl)

2. B || (hkl)

3. B || (hkl)

**Please note:** A detailed experimental plan has to be provided for each orientation of the sample. More information is given in the 'Experimental plan' section of this form.

## Experimental plan

Please provide a detailed description of the intended measurements, stating clearly T, B and measuring time of each step. The **example** shows how the required information should be summarized.

**Single crystal sample:**

Please remember to provide the required information for each orientation of the sample (1 sample with 3 orientations = 3 experimental plans).

All measurements of the sample must be summarized into one pdf file.

Experimental plan  
upload (pdf file)\*

Choose File No file chosen



**WE LOOK FORWARD  
TO RECEIVING  
YOUR PROPOSALS**