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| Beam Time Request Form  Version 1.0, status 11.04.2024 |  |

1. REQUESTER DETAILS

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| Date of Request: |  |
| Principal Investigator: |  |
| Institution: |  |
| Contact Information (phone/email): |  |
| Experiment Members: |  |
| Collaborating Institutions (optional): |  |
| Funding Source (optional): |  |
| Approximate Experiment Duration  and/or Desired Dates/Time: |  |

1. EXPERIMENT DESCRIPTION
2. **Scientific justification** (one paragraph):

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1. **Experiment short description and goals** (incl. requested statistics, max 1 page):

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1. BEAM PARAMETERS

Please check the available beam parameters at the PITZ webpage <https://pitz.desy.de/research_and_development/flashlabpitz/beam_time_request/> first and then provide as many details as possible for your experiments.

Provide ranges if you have the necessity to vary some of the parameters during your experiment. For each setpoint also the allowed jitter (statistics error) and tolerance of the mean value (systematic error) have to be specified.

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| Dose, Gy: |  |
| Dose rate, Gy/s: |  |
| Bunch charge, nC (optional): |  |
| Bunch time structure (optional): |  |
| Beam energy / energy spread, MeV (optional): |  |
| Transverse beam/field size/shape, mm: |  |
| Required homogeneity over field size, %: |  |
| Critical parameters and stability requirements (e.g., jitter of pointing, beam size, charge, *etc*): |  |

1. EXPERIMENTAL APPARATUS

Give a detailed description of the experimental apparatus, including as appropriate:

1. Sketch of the planned layout with materials and dimensions, including sample holders
2. Description of the DAQ system coming with the experiment and what additional DAQ will be needed from PITZ
3. Elemental composition and masses of eventual items exposed to the beam or a secondary radiation field
4. Other electronics components (HV supplies, scopes, etc.)
5. Cooling or gas supply needs
6. Radioactive sources
7. Computing infrastructure needs
8. Support needed from PITZ: triggers, technicians, DAQ systems, cooling, gas lines, etc.
9. Any other aspect of importance

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1. EXPERIMENT LOGISTIC

Give details of the logistics for the experiment, including as appropriate:

1. Space requirements (include sketch)
2. Special requirements (cooling water, gasses, electricity, magnets, detectors, etc)
3. Estimated installation time
4. Duration of the experiment
5. Desired calendar dates
6. Estimation of activation of items or auxiliary equipment exposed to radiation, or expected total exposure (time and beam intensity)
7. Final destination of irradiated items (please be aware that irradiated equipment may be considered as radioactive after the experiment and will need to be handled according to radiation protection regulations at DESY Zeuthen. Some details can be found on <https://sicherheit-zeuthen.desy.de/radiation_protection/index_eng.html>)
8. Required storage capacities and storage conditions
9. Any other aspect of importance

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1. FOR CHEMISTRY / BIOLOGY EXPERIMENT (in vitro)

Give details of the experiment, including as appropriate:

1. Experimental model
2. Experiment plan (aim, duration, needed chemical or biological methodologies)
3. Sample information (volume of sample, sample chemical/biological composition, sample biosafety classification, number of samples, storage conditions)
4. Special requirements for sample preparation (lab, equipment, time constrains etc)
5. Special requirements for sample analysis (lab, equipment, time constrains etc)
6. Special requirements for sample shipment
7. Involved guest scientists (planned duration of stay, qualifications)
8. Any other aspect of importance

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**PLEASE note**:

* Keep sample volume (irradiated area) as small as possible
* If the irradiation is to be done in tubes, it should be done at PITZ available tubes (details at the PITZ webpage <https://pitz.desy.de/research_and_development/flashlabpitz/beam_time_request/>)
* If the sample preparation and analysis is to be done at PITZ / TH Wildau, it should be done by guest scientists