

This template and its \LaTeX source code are meant to aid researchers in covering all relevant aspects of proposal preparation and experiment planning for the IOTA/FAST facility at Fermilab. Researchers may use the software of their choice when writing the document. The proposal is to be submitted in PDF format to the IOTA/FAST Scientific Committee. Please remove instructions in italics before submission.

Experiment Title (ET)

Use a synthetic and descriptive title. Choose an experiment acronym with fewer than 16 characters.

PERSONNEL

- *Indicate the name, institution, professional title, phone number and e-mail of the Spokesperson or Principal Investigator; Deputy Spokesperson or co-PI (optional) and Fermilab Liaison (necessary if spokesperson and deputy spokesperson are not Fermilab employees).*
- *List collaborator names, institutions, professional titles and their role in the experiment.*

PURPOSE AND METHODS

Describe the following aspects:

- *Background information*
- *Scientific or technical motivation and purpose*
- *Experimental methods*
- *Expected results and sources of uncertainty*

BEAM CONDITIONS

List the values and ranges of requested beam parameters, specifying any constraints on accuracy or stability: species, intensity, energy, number of bunches, transverse emittance, beam size, bunch length, momentum spread, time structure. Does the experiment require lattice, orbit or other modifications?

APPARATUS

Describe the existing or planned instrumentation and equipment necessary to carry out the experiment. Specify which resources are to be provided by Fermilab and which ones are external. List any specific safety considerations or hazards. Include the following aspects:

- *Sketch of the layout with equipment and dimensions*
- *Engineering and technical personnel support*

- *Infrastructure needs: rigging, vacuum, clean rooms, cooling, gas lines, cryogenics*
- *Instrumentation and detectors*
- *Electronics and data acquisition: power supplies, cables, oscilloscopes, digitizers, controls*
- *Computing: front-end computers, networking, data storage, data backup, off-line analysis*

RUN PLAN

Include the following aspects:

- *Proposed installation plan*
- *Requested running period and approximate duration*
- *Preferred shift duration and distribution in time*
- *Proposed decommissioning plan*

FUNDING

Optional but useful for planning. List external grants and funding profile.

[1] *List papers, notes, web sites and other background documentation as references.*