Experiment Title (ACRONYM)

Author One* and Author Two†

Institution A

Author Three‡ and Author Four

Fermilab

I. GENERAL INFORMATION

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.

- *Use a synthetic and descriptive title. Choose an experiment acronym with fewer than 16 characters.*
- *Indicate the name, institution, 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 and institutions.*
- *The role of each collaborator is to be listed in Section VI.*

II. PURPOSE AND METHODS

Describe the following aspects:

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

III. 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?

* Principal Investigator; email: author.one@institution.a; phone: (123) 456-7890
† Co-PI; author.two@institution.a
‡ Fermilab Liaison; author.three@fnal.gov

IV. 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*

V. 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*

VI. PERSONNEL ROLES

Indicate the specific role of each collaborator. Please refer to https://casrai.org/credit *for a general taxonomy of contributor roles and adapt it to the specific experiment. For example:*

Author One: conceptualization, supervision, funding acquisition, writing.

Author Two: investigation, data curation, software, data analysis.

Author Three: resources, apparatus integration, investigation.

Author Four: investigation, data analysis, visualization, writing.

VII. FUNDING

Optional, but useful for planning. List external grants, funding profiles, milestones and deadlines.

---

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