

**US CMS HL-LHC PROPOSAL**

**(Maximum length 15 pages in font size 12)**

**TITLE: Choose a title that conveys the scope of the R&D. Avoid generic titles such as PROPOSAL FOR HL-LHC R&D.**

**ABSTRACT**

Briefly describe the highlights of your R&D.

# 1 R&D OVERVIEW (1-2 pages)

Provide a clear description of the R&D work you propose for the High Luminosity LHC (HL-LHC). Indicate specifically how this work addresses one or more of the critical needs of the CMS Detector in the HL-LHC era.

# 2 PARTICIPATING INSTITUTIONS AND PRINCIPAL INVESTIGATORS (1 page)

Provide a list of the participating institutions and the people involved in this R&D effort. Include the name of a contact person (PI) at each institution.

# 3 TECHNICAL DESCRIPTION AND DELIVERABLES OF THE PROPOSED R&D (9-10 pages)

This section should contain a detailed description of the proposed R&D activities.

# 4 RELATION TO EXISTING EFFORTS (1 page)

This section should indicate how the proposal relates to existing R&D activities, both inside and outside of CMS.

# 5 SCHEDULE AND MILESTONES (1 page)

This section should describe the foreseen schedule for the R&D activities. It should be made clear which are the intermediate steps towards achieving the final goals. Provide a breakdown, a list of activities, and an activity matrix. Indicate milestones and deliverable items planned for FY14 and FY15.

**6 FACILITIES, EQUIPMENT, AND OTHER RESOURCES (1 page)**

Briefly describe the organizational resources available to support this R&D.

**7 BUDGET AND BUDGET JUSTIFICATION FOR FY14 (Fill out separate EXCEL spreadsheet)**

The spreadsheet includes detailed instructions on the budget preparation. Note that project funds can only be directed to support technical personnel (not physicists, postdocs, or graduate students). Funding can be used to support undergraduate lab assistants. Travel funds are expected to be used for the people directly involved in the supported activities. If the proposed activities are also supported by generic R&D or other funding sources please provide a clear breakdown.

**8 PRELIMINARY BUDGET AND BUDGET JUSTIFICATION FOR FY15 (Fill out separate EXCEL spreadsheet)**

Describe activities foreseen to achieve the deliverables and provide a preliminary budget.