

**US CMS HL-LHC PROPOSAL for Calendar Year 2015**

**(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. DATE:**

**CONTACT PERSON:**

**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 in CY2015 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. Indicate the overall contact person for this R&D effort.

# 3 STATUS AND PLANS OF R&D IN CY2014 (IF APPLICABLE) (2-3 pages)

This section should contain a detailed description of the current (CY2014) R&D activities where supported by U.S. CMS R&D funds.

# 4 TECHNICAL DESCRIPTION AND DELIVERABLES OF THE PROPOSED R&D IN CY2015 (5-9 pages)

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

# 5 RELATION TO EXISTING EFFORTS (1 page)

Indicate how the proposal relates to existing R&D activities, both within and outside of CMS.

# 6 SCHEDULE AND MILESTONES (1 page)

Describe the foreseen schedule for the R&D activities. Detail the intermediate steps towards achieving the final goals. Provide an activity matrix for the various institutions, showing tasks and time periods. Indicate milestones and deliverable items planned for CY2015.

**7 BUDGET AND BUDGET JUSTIFICATION FOR CY2015 (Fill out separate EXCEL spreadsheet)**

The spreadsheet includes detailed instructions on the budget preparation. Itemize your budget according to materials, travel, and labor. Provide a written justification for each item in the budget. Include each institution’s rates for fringe and indirect costs. 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.

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

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