

Abstract Submitted
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Search for New Physics with Bs Mesons at CMS/LHC GIOR-DANO CERIZZA, University of Tennessee, CMS COLLABORATION — The large cross section for the production of b-quarks in LHC's proton-proton collisions allows precision measurements of CP violation in the Bs meson system. The CMS experiment is well suited to search for new generations of quarks and forces between them (New Physics) complementary to the B-Factories in decay channels such as $B_s \rightarrow J/\Psi \phi$. New Physics could significantly alter CP observables with respect to their predicted values in the Standard Model. We report on simulation studies of the channel $B_s \rightarrow J/\Psi \phi$. The extraction of CP parameters from the proper lifetime distribution relies strongly on the CMS pixel detector. It is mounted closely to the interaction point and has an unprecedented about 60 Million readout channels. At present this detector is commissioned in the CMS detector and will be exposed to first proton-proton collisions in fall of this year. We present the detector and first operational experiences.

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