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Latest results from the MEG experiment

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The MEG experiment, which searches for a lepton flavor violating muon decay, $\mu^+ \rightarrow e^+\gamma$, to explore new physics like supersymmetric grand unification, has started physics run since 2008 at Paul Scherrer Institute in Switzerland. Its innovative detector system, which consists of a 900 liter liquid xenon scintillation photon detector with 846 2 inch photomultiplier tubes and a positron spectrometer with a superconducting magnet, drift chamber, and timing counter, enables orders of magnitude better sensitivity than previous experiments. By using physics data collected in 2009 and 2010, we set a new 90% C.L. upper limit of 2.4×10^{-12} on the branching ratio of the $\mu^+ \rightarrow e^+\gamma$ decay, which is the most stringent limit on the existence of this decay to date. The current status of the experiment as well as the latest results will be presented.