

Abstract Submitted  
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**PRISM and Search for Charged Lepton Mixing** YOSHITAKA KUNO, Osaka University — Search for charged lepton mixing attracts much interest after neutrino mixing has been discovered. The search is known to be sensitive to new physics beyond the Standard Model (SM) and beyond neutrino oscillation phenomena. One of various extension to the SM is supersymmetric grand unification theories or supersymmetric seesaw models. The predictions by these models are just a few orders magnitudes lower than the present experimental limits, indicating large discovery potentials. One of the best system to search for charged lepton mixing is the muon. In Japan, we are developing a new muon source with high intensity, high purity and high luminosity. It is based on solenoid pion capture, phase rotation by FFAG (fixed field alternating gradient accelerator). The purpose is to carry out an experiment to search for the muon-to-electron conversion processes at a sensitivity of  $10^{-18}$ . At Osaka university, the FFAG ring accelerator is being constructed. The status and future plan of the PRISM project will be presented.

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