Record Nr. UNINA9910454076403321 **Titolo** The proceedings of new initiatives on lepton flavor violation and neutrino oscillation with high intense muon and neutrino sources [[electronic resource]]: Honolulu, Hawaii, 2-6 October 2000 / / editors, Yoshitaka Kuno, William R. Molzon, Sandip Pakvasa Pubbl/distr/stampa River Edge, NJ,: World Scientific, c2002 **ISBN** 1-281-92946-8 9786611929466 981-277-700-8 Descrizione fisica 1 online resource (260 p.) Altri autori (Persone) KunoY (Yoshitaka) MolzonWilliam Richard <1952-> **PakvasaS** Disciplina 539.7/2114 Soggetti Muons **Neutrinos** Oscillations Leptons (Nuclear physics) Particles (Nuclear physics) - Flavor CP violation (Nuclear physics) Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "The international workshop on 'New Initiatives of Lepton Flavor Violation and Neutrino Oscillation with Very Intense Muon and Neutrino Sources' was held from October 2-6, 2000 at the East-West Center of the University of Hawaii, Hawaii" -- Pref. Includes bibliographical references. Nota di bibliografia Nota di contenuto Contents : Preface ; Muon Applied Science: Status at the End of the 20th Century ; 2 Muon-Catalyzed Fusion and Fusion 1 Introduction **Energy Development** Science Studies by Methods using Labelled Electrons with Muons ; 4 Disasters Prevention with High-Energy Muons References Theoretical Motivations for Lepton Flavor

Violation

: 1 Introduction

: 2 Global Symmetries of the Standard Model : 3 Mass Scales and Experimental Probes ; 4 LFV and Electroweak Symmetry Breaking 5 LFV in Supersymmetry : 6 What Will We Learn? : References Lepton Flavor Violation and Supersymmetric Models with Right-Handed Neutrino Introduction ; 2 Lepton Flavor Violation in Supersymmetric Models with Right-handed Neutrinos ; 3 Atmospheric Neutrino Results and r -> uy Decay ; 4 Solar Neutrino Results and u -> ey Decay : 5 Conclusions References Lepton Flavor Violation in Supersymmetric Models with R-Parity Violation : 1 Introduction : 2 SUSY models with R-parity violation ; 3 Neutrino masses in R-parity violating models ; 4 Lepton-flavor violation in muon processes 5 Conclusions : References LFV and Future Lepton Colliders 1 Introduction ; 2 Radiative Generation of LFV Slepton Masses in the MSSM with Righthanded Neutrinos ; 3 Cross Sections of LFV Processes in Lepton Colliders ; 4 Background and Sensitivity for LFV ; 5 Conclusion ; References Neutrino Oscillation Scenarios and GUT Model Predictions

Sommario/riassunto

The area of physics involving muons and neutrinos has become exciting in particle physics. Using their high intensity sources, physicists undertake, in various ways, extensive searches for new physics beyond the Standard Model, such as tests of supersymmetric grand unification (SUSY-GUT) and precision measurements of the muon and neutrino properties, which will in future extend to ambitious studies such as determination of the three-generation neutrino mixing matrix elements and CP violation in the lepton sector. The physics of this field is advancing, with potential improvements of the sourc