Record Nr. UNINA9910454394203321 Proceedings of the Carolina Symposium on Neutrino Physics [[electronic **Titolo** resource]]: its impact on particle physics, astrophysics and cosmology : University of South Carolina, 10-12 March 2000 / / editors, J. Bahcall ... [et al.] Pubbl/distr/stampa Singapore;; River Edge, NJ,: World Scientific, c2001 **ISBN** 1-281-96069-1 9786611960698 981-281-171-0 Descrizione fisica 1 online resource (356 p.) Altri autori (Persone) BahcallJohn N AvignoneF. T. <1933-> Disciplina 539.7215 Soggetti Neutrinos Particles (Nuclear physics) **Nuclear physics Astrophysics** Neutrino interactions Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "The Carolina Symposium is held in honor of Dr. Frank T. Avignone, III" Note generali --P. v. Includes bibliographical references. Nota di bibliografia Nota di contenuto CONTENTS : Preface : COSMOLOGY ; Dark ; Looking Back with Neutrinos SUPERNOVAE NUCLEOSYNTHESIS ; Neutrino Effects ; Supernova Studies at in Nucleosynthesis **ORLaND** ; SOLAR NEUTRINOS Astrophysical Neutrinos: 20th Century and Beyond Single Atom Extraction and Classification with a Hybrid Solar Neutrino Detector Sudbury Neutrino Observatory : The Solar Core ; NEUTRINO PROPERTIES and Solar Neutrinos - THEORETICAL : Neutrinos and the Standard Model ; Mass Matrix for Atmospheric Solar and

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Sommario/riassunto

Neutrinos play a key role in many areas of particle physics, nuclear physics and astrophysics. The recent discovery of neutrino oscillation has given the first hint of new physics beyond the standard model. Clearly, it is extremely important to study further the oscillation and other fundamental properties of neutrinos. It is also important to improve our knowledge of neutrino-nucleus reactions, which are crucial for understanding a large class of astrophysical phenomena. These and many other interesting questions can be investigated at stopped pion neutrino facilities like the one planned fo