Record Nr. UNINA9910778371703321 Astroparticle, particle and space physics, detectors and medical physics **Titolo** applications [[electronic resource]]: proceedings of the 9th Conference : Villa Olmo, Como, Italy, 17-21 October 2005 / / editors, Michele Barone ... [et al.] Pubbl/distr/stampa Hackensack, N.J.,: World Scientific, c2006 **ISBN** 1-281-92490-3 9786611924904 981-277-367-3 Descrizione fisica 1 online resource (1162 p.) Collana Astroparticle, Particle, Space Physics, Radiation Interaction, Detectors and Medical Physics Applica;; v.3 Altri autori (Persone) BaroneMichele 539.7 Disciplina Soggetti Nuclear astrophysics Particles (Nuclear physics) Particle acceleration **Nuclear counters** Nuclear physics - Instruments Medical physics - Instruments Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Nota di contenuto CONTENTS : Preface ; Advanced Miniaturized **Detectors and Particle Identification** ; A Novel Micromegas Detector for In-core Nuclear Reactor Neutron Flux Measurements : The ALICE TPC : The ATLAS RPC Test Stands Performances in High Magnetic Fields of Fine-mesh Photomultipliers for Fast Time-of-flight Detectors Recent Results on GridPix Detectors: An Integrated Micromegas Grid and a Micromegas Ageing Test ; RICH Detector at Jefferson Lab Design Performance and Physics Results Hybrid-Photon-Detectors in the LHCb RICH System

Development of a Fast Transition Radiation and Tracking Detector for

CBM at FAIR

R&D on a Detector for Very High Momentum Charged Hadron Identification in ALICE

; The Design and Test of the ATLAS Diamond Beam Conditions Monitor The AMS02 Transition Radiation Detector (TRD) - A Gasfilled Detector for the International Space Station

A New Automatic Microscope for High Speed Analysis of Nuclear Emulsions : A Novel

Type of Proximity Focusing RICH Counter with Multiple Refractive Index Aerogel Radiator

A Subminiature Scintillation Detector for Catheter Operation Analysis of Test-beam Data from a Prototype LHCb RICH Detector

; Single Crystal CVD Diamond Detectors for Hadron Physics

; Improvement of Particle Identification by Energy Loss in a Stack of Silicon Detectors

Studies for a Fast RICH

## Sommario/riassunto

The exploration of the subnuclear world is done through increasingly complex experiments covering a wide range of energies and in a large variety of environments - from particle accelerators, underground detectors to satellites and space laboratories. For these research programs to succeed, novel techniques, new materials and new instrumentation need to be used in detectors, often on a large scale. Hence, particle physics is at the forefront of technological advancement and leads to numerous applications. Among these, medical applications have a particular importance due to the health and soc