

1. Record Nr.	UNINA9910300392603321
Titolo	Universe of Scales: From Nanotechnology to Cosmology : Symposium in Honor of Minoru M. Freund // edited by Friedemann Freund, Stephanie Langhoff
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-02207-5
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (204 p.)
Collana	Springer Proceedings in Physics, , 1867-4941 ; ; 150
Disciplina	500.5 520 523.1 530 530.8 536.56 620.5
Soggetti	Measurement Measuring instruments Solar system Nanoscience Cosmology Low temperatures Measurement Science and Instrumentation Space Physics Nanophysics Low Temperature Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Part I: Memories of a Great Life -- Mino's Smile.- Mino in Adjectives -- With Mino on the Road -- Phone Call at 2 am -- Witness to a Formidable Dialogue -- Stunning Intellect and Pure Mind -- Growing up -- Poem -- Part II: Science Chapters -- Mino in Japan: The Infrared Telescope in Space -- Mino's Sense of Stardust -- How Brains Make

Decisions -- From Neurons to Neutrinos -- Modeling the Whole Earth System -- Microsatellite Ionospheric Network in Orbit -- Formation Flying, Cosmology and General Relativity -- Earthquake Precursor Research using Radio Tomography of the Ionosphere -- Pre-Earthquake Signals at the Ground Level -- Rock Softening with Consequences for Earthquake Science -- Steerable Nanobots for Diagnosis and Therapy -- Causal Factors for Brain Tumor and Targeted Strategies.

Sommario/riassunto

The presentations at this NASA-hosted Symposium in honor of Mino Freund will touch upon the fields, to which his prolific mind has made significant contributions. These include low temperature physics, cosmology, and nanotechnology with its wide-ranging applicability to material science, neuroscience, Earth sciences and satellite technology. To learn more about Mino's career you can download the "Tribute" <<http://multimedia.seti.org/mino/Tribute.pdf>>, which outlines his journey from (i) low-temperature physics and superconductivity at the ETH Zürich to (ii) building one remarkable milliKelvin refrigerator for the US-Japan IRTS mission at UC Berkeley and ISAS in Japan to (iii) a decade in cosmology, to (iv) being on the micro-bolometer team at NASA Goddard for the HAWC instrument on SOFIA, to (v) developing at AFRL the nanotechnology portfolio for the entire Air Force. This was followed by six years at the NASA Ames Research Center, where Mino formulated his far-ahead ideas about swarms of capable nanosats circling the Earth, which have since started to become a reality. He engaged in a broad range of nanotechnology projects, including novel applications in neuroscience well before he himself was struck by the deadly brain tumor.