

1. Record Nr.	UNINA990007898840403321
Autore	Congresso nucleare : <20. ; : 1975
Titolo	L'accresciuto ruolo dell'energia nucleare nella presente situazione energetica : atti del 20. congresso nucleare di Roma / organizzato dal Forum italiano dell'energia nucleare, dal Comitato nazionale energia nucleare e dall'Ente nazionale energia elettrica
Pubbl/distr/stampa	Roma : CNEN, 1975
Descrizione fisica	147 p. ; 21 cm
Collana	Simposi / Comitato nazionale per l'energia nucleare
Locazione	SE
Collocazione	S H/2.2216 COM/75
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr.	UNINA9910956346303321
Titolo	Space science research developments // Jonathan C. Henderson and Jennifer M. Bradley, editors
Pubbl/distr/stampa	Hauppauge, N.Y., : Nova Science Publishers, c2011
ISBN	1-62100-049-4
Edizione	[1st ed.]
Descrizione fisica	1 online resource (302 p.)
Collana	Space science, exploration and policies
Altri autori (Persone)	HendersonJonathan C BradleyJennifer M
Disciplina	520
Soggetti	Space sciences - Research
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 and index.
Nota di contenuto	Intro -- SPACE SCIENCE RESEARCH DEVELOPMENTS -- SPACE SCIENCE RESEARCH DEVELOPMENTS -- LIBRARY OF CONGRESS CATALOGING-IN-PUBLICATION DATA -- CONTENTS -- PREFACE -- Chapter 1 RESEARCH ON AERODYNAMICS OF LARGE BOLIDES -- ABSTRACT -- INTRODUCTION -- CRUSHING OF METEORIC BODIES -- BOLIDES WITH THE MODERATE VALUES OF MASS LOSS PARAMETER -- ENTRANCE INTO ATMOSPHERE OF THE TUNGUSKA SPACE BODY -- CONCLUSION -- REFERENCES -- Chapter 2 SOLAR DYNAMICS AND SOLAR-TERRESTRIAL INFLUENCES -- ABSTRACT -- INTRODUCTION -- A BRIEF HISTORICAL OVERVIEW -- Sunspots and Solar Rotation -- Sunspot Cycle -- Sunspots and Geomagnetic Storms -- Sunspots and Climate -- SOLAR ACTIVITY AND TEMPERATURE IN THE 11-YEAR SUNSPOT CYCLE -- Historical Compilation -- Data -- Results -- Secular Cycle of North-South Solar Activity Asymmetry -- ATMOSPHERIC CIRCULATION -- Atmospheric Circulation and Earth's Rotation -- SOLAR ROTATION AND EARTH'S ROTATION -- Solar Rotation -- SOLAR WIND AS A MEDIATOR BETWEEN THE SOLAR ROTATION AND THE EARTH'S ROTATION -- Solar Rotation in Positive and Negative Polarity Cycles -- Earth's Rotation in Positive and Negative Polarity Cycles -- Solar Wind in Positive and Negative Polarity Cycles -- SOLAR WIND AND THE SOLAR MAGNETIC FIELD -- Interplanetary Magnetic Field and Solar Photospheric Field -- Solar Photospheric Field and the Earth's Rotation -- Interplanetary Magnetic Field and Solar Equatorial Rotation -- Interplanetary Magnetic

Field and the Latitudinal Gradient of Solar Rotation -- DIFFERENTIAL ROTATION AND GEOMAGNETIC DISTURBANCES -- Geoeffectiveness of Different Solar Drivers -- Solar Differential Rotation and Magnetic Clouds -- Differential Rotation and Helicity -- Reversed (Anti-solar) Differential Rotation -- CONCLUSION -- REFERENCES -- Chapter 3 GEOLOGY OF THE TERRESTRIAL PLANETS WITH IMPLICATIONS TO ASTROBIOLOGY AND MISSION DESIGN. ABSTRACT -- INTRODUCTION -- SPACECRAFT RECONNAISSANCE OF THE TERRESTRIAL PLANETS -- GEOLOGY AND ENVIRONMENTAL CONDITIONS OF THE TERRESTRIAL PLANETS -- Mercury -- Venus -- Earth -- The Moon -- Mars -- ASTROBIOLOGICAL IMPLICATIONS -- Mercury -- Venus -- Earth -- Moon -- Mars -- PROPOSED MISSION DESIGNS AND SCENARIOS -- CONCLUSIONS -- REFERENCES -- Chapter 4 THE ORIGIN OF THE MAGNETIC FIELD OF PULSARS AND THE GRAVITOMAGNETIC THEORY -- ABSTRACT -- INTRODUCTION -- EMISSION MODELS OF PULSARS -- MAGNETIC FIELD DEPENDENCE OF BRAKING INDICES -- MAGNETIC FIELD FROM GRAVITO-ELECTROMAGNETIC ORIGIN -- OBSERVATIONAL DATA -- BRAKING INDICES FOR SOME YOUNG PULSARS -- CONCLUSION -- ACKNOWLEDGMENT -- REFERENCES -- Chapter 5 PALEOSHORELINES AND THE EVOLUTION OF THE LITHOSPHERE OF MARS -- ABSTRACT -- INTRODUCTION -- PALEOSHORELINES -- Elevations Range along Deuteronilus, Arabia, and Meridiani Shorelines -- Water Volumes in the Ancient Oceans -- Re-evaluation of Paleoshorelines -- Elevation Ranges along Paleoshorelines and Vertical Movements of the Lithosphere -- THERMAL ISOSTASY AND THERMAL EVOLUTION OF THE LITHOSPHERE -- Thermal Isostasy -- Temperature Profiles -- Parameter Values -- Deformation of Paleoshorelines -- Ancient Heat Flow Variations -- CONCLUSION -- ACKNOWLEDGMENTS -- REFERENCES -- Chapter 6 DEALING WITH POTENTIALLY HAZARDOUS ASTEROIDS -- ABSTRACT -- INTRODUCTION -- 1. THE END OF ASTEROID DISCOVERY? -- 2: ASTEROID FAMILIES AND COMPLETENESS OF SEARCHES -- 3. HAZARDOUS ASTEROIDS -- 4. CONSEQUENCES OF AN IMPACT OF A CELESTIAL BODY WITH EARTH -- 5. SOURCES OF THE PHAS -- 6. A STRANGE OBJECT: COMET/ASTEROID ELST-PIZARRO. -- 7. RESONANCE OBJECTS (ALINDA ASTEROIDS) -- 8. HUNGARIA- AND PHOCAEA ASTEROIDS -- 9. CONCLUSIONS -- ANNEX 1 -- ANNEX 2 -- Provisional Designations -- REFERENCES. Chapter 7 THERMAL PROPERTIES AND TEMPERATURE VARIATIONS IN MARTIAN SOIL ANALOGUES -- ABSTRACT -- INTRODUCTION -- I. CHARACTERIZATION OF MARTIAN SOILS -- 1. Martian Soil Compositions and Stratifications -- 2. Site 1 Sediments and Lava Flows: Area in the Mouth of Ares Vallis (lat 19.33 N -- Long 33.55 W) -- 3. Site 2 Hesperian Volcanic Plains: Lunae Planum(lat 10-20 N, long 70-60 W), Sinai Planum, Solis Planum, Syrtis Major Planitia and Hesperia Planitia -- II. THERMAL PROPERTIES OF MARTIAN SOIL ANALOGUES -- 1. Theoretical Prediction of Thermal Conductivity and Diffusivity -- 1.1. Two Phase Martian Soil Analogue (Solid and Gas) -- 1.2. Three phase Martian Soil Analogues (Solid, Gas and Ice) -- 2. Martian Analogues -- 3. Numerical Evaluation of Two Phase Martian Soil Analogue -- 4. Numerical Evaluation of Three Phase Partially Frozen Martian Soil Analogue -- III. TEMPERATURE VARIATION IN MARTIAN SOIL ANALOGUES -- 1. Temperature Variation -- 1.1. Martian Soil Analogues, Type A -- 1.1.1. Dry Martian Soil Analogue, Type AD -- 1.1.2. Frozen Martian Soil Analogues, Type AF -- 1.2. Martian Soil Analogue, Type B -- 1.2.1. Dry Martian Soil Analogue, Type BD -- 1.2.2. Frozen Martian Soil Analogue, Type BF -- 2. Relation between Temperature Distribution and Physical Properties -- 3. CONCLUSIONS

-- REFERENCES -- Chapter 8 ON THE 5D EXTRA-FORCE ACCORDING TO BASINI-CAPOZZIELLO-PONCE DE LEON FORMALISM AND THE EXPERIMENTAL RESEARCH OF EXTRA DIMENSIONS ON-BOARD INTERNATIONAL SPACE STATION (ISS) USING LASER BEAMS -- Abstract -- 1.Introduction -- 2.TheBasini-CapozzielloPonceDeLeonFormalismandResemblanceswithMashoon-Wesson-LiuandOverduin-WessonFormalisms. 3.DimensionalReductionfrom5Dto4DAccordingtoBasini-CapozzielloPonceDeLeon,Mashoon-Wesson-LiuandOverduin-Wesson. PossibleExperimentalDetectionofExtraDimensionsinStrongGravitationalFieldsorOn-BoardtheInternationalSpaceStation(ISS) UsingtheGravitationalBendingOfLightinExtraDimensions -- 4. ExperimentalDetectionofExtraDimensionsUsingGravitationalRed-ShiftsOn-BoardtheInternationalSpaceStationISS -- 5.Conclusion-PhysicsOfExtraDimensionsasanExperimentalBranchofPhysicsfortheFirstTime -- 6.Epilogue -- Acknowledgments -- 7.Remarks -- 8.Legacy -- References -- Chapter 9 ORIGIN OF THE SATURN RINGS: ELECTROMAGNETIC MODEL OF THE SOMBRERO RINGS FORMATION -- ABSTRACT -- 1. INTRODUCTION -- 2. AN EXPERIMENTAL DATA OBSERVATION -- Thin Structure and Sharp Edges of the Rings -- Planetcentral Dust Flow -- Change of the Azimuth Brightness of the A Ring of Saturn -- Spokes in the Ring B of Saturn -- High Reflection and Low Brightness of the Rings Particles in the Radiofrequency Range -- Own Wide Band Pulse Radiation of the Rings -- Frequency Anomalies of Thermal Radiation of the Rings in the 100 $\mu$ m - 1cm Range -- Color Difference of Rings in a Small Scale -- Anomalous Inversion Reflection of Microwaves with Circular Polarization Above 1 Cm -- An Atmosphere of "Unknown" Origin at the Rings -- Existence of Wave of Density and Bending Waves within the Rings -- 3. THEORETICAL SOLUTION OF THE SATURN'S RINGS ORIGIN -- 4. SEPARATION AND COLLISION OF THE PARTICLES WITHIN THE SOMBRERO OF RINGS -- 4. CONCLUSION -- REFERENCES -- INDEX.

---

Sommario/riassunto

This book presents current research in the field of space science. Topics discussed include research on the aerodynamics of large bolides; solar dynamics and solar-terrestrial influences; the geology of terrestrial planets; the origin of the magnetic field of pulsars; paleoshorelines and the evolution of the lithosphere of Mars; thermal properties and temperature variations in Martian soil and the origin of the Saturn rings.

---