1. Record Nr. UNINA9910154747303321

Autore	Marcus Michael B.
Titolo	Random Fourier Series with Applications to Harmonic Analysis. (AM-101), Volume 101 / / Gilles Pisier, Michael B. Marcus
Pubbl/distr/stampa	Princeton, NJ : , : Princeton University Press, , [2016] ©1982
ISBN	1-4008-8153-6
Descrizione fisica	1 online resource (161 pages)
Collana	Annals of Mathematics Studies ; ; 241
Disciplina	515/.2433
Soggetti	Fourier series Harmonic analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Frontmatter -- CONTENTS -- CHAPTER I: INTRODUCTION -- CHAPTER II: PRELIMINARIES -- CHAPTER III: RANDOM FOURIER SERIES ON LOCALLY COMPACT ABELIAN GROUPS -- CHAPTER IV: THE CENTRAL LIMIT THEOREM AND RELATED QUESTIONS -- CHAPTER V: RANDOM FOURIER SERIES ON COMPACT NON-ABELIAN GROUPS -- CHAPTER VI: APPLICATIONS TO HARMONIC ANALYSIS -- CHAPTER VII: ADDITIONAL RESULTS AND COMMENTS -- REFERENCES -- INDEX OF TERMINOLOGY -- INDEX OF NOTATIONS -- Backmatter
Sommario/riassunto	In this book the authors give the first necessary and sufficient conditions for the uniform convergence a.s. of random Fourier series on locally compact Abelian groups and on compact non-Abelian groups. They also obtain many related results. For example, whenever a random Fourier series converges uniformly a.s. it also satisfies the central limit theorem. The methods developed are used to study some questions in harmonic analysis that are not intrinsically random. For example, a new characterization of Sidon sets is derived.The major results depend heavily on the Dudley-Fernique necessary and sufficient condition for the continuity of stationary Gaussian processes and on recent work on sums of independent Banach space valued random variables. It is noteworthy that the proofs for the Abelian case immediately extend to the non-Abelian case once the proper definition

		of random Fourier series is made. In doing this the authors obtain new results on sums of independent random matrices with elements in a Banach space. The final chapter of the book suggests several directions for further research.

2.	Record Nr.	UNINA9910298373403321
	Titolo	Achievements, History and Challenges in Geophysics : 60th Anniversary of the Institute of Geophysics, Polish Academy of Sciences / / edited by Robert Bialik, Mariusz Majdaski, Mateusz Moskalik
	Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
	ISBN	3-319-07599-3
	Edizione	[1st ed. 2014.]
	Descrizione fisica	1 online resource (419 p.)
	Collana	GeoPlanet: Earth and Planetary Sciences, , 2190-5193
	Disciplina	551.082
	Soggetti	Geophysics Geotechnical engineering Geophysics/Geodesy Geotechnical Engineering & Applied Earth Sciences
	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 at the end of each chapters.
	Nota di contenuto	History and Achievements -- Best practices in Earth Sciences. The national and international experience of the Institute of Geophysics of the Polish Academy of Sciences -- On the roots of the Institute of Geophysics, Polish Academy of Sciences -- 50 Years of Palaeomagnetic Studies in the Institute of Geophysics, Polish Academy of Sciences -- Natural variations of the geomagnetic field observations and application to study of the Earth's interior and ionosphere -- Half century of the ozone observations at the Central Geophysical Observatory, IGF PAS, Belsk, Poland -- Forty years of water research at the Institute of Geophysics, Polish Academy of Sciences -- Changes in catchment hydrology caused by changes in the environment – a contribution of the Water Resources Department, Institute of Geophysics PAS -- Five Polish seismic expeditions to the West

Antarctica (1979-2007) -- Department of Polar and Marine Research: the Hornsund Station and Other Activities in the Arctic and Antarctic Regions -- Seismology and Earth Dynamics - a Variety of Scientific Approaches -- Sixty Years of Publishing with the Institute of Geophysics -- Exemplary Current Research and Geophysical Methods. - Discharge Measurements in Lowland Rivers: Field Comparison between an Electromagnetic Open Channel Flow Meter (EOCFM) and an Acoustic Doppler Current Profiler (ADCP) -- Random Domino Automaton – Modeling Macroscopic Properties by Means of Microscopic Rules -- Continental Passive Margin West of Svalbard and Barents Sea in Polish Arctic Seismic Studies -- Selected Theoretical Methods in Solid Earth Physics – Contribution from the Institute of Geophysics PAS -- Application of Passive Hydroacoustics in the Studies of Sea-Ice, Icebergs and Glaciers: Issues, Approaches and Future Needs -- Pigeon navigation model based on a vector magnetometer -- Analysis of surface ozone variations based on the long-term measurement in Kraków (1854-1878), (2005-2013) and Belsk (1995-2012) -- Dissolved oxygen in rivers: concepts and measuring techniques -- Gradient-based similarity in the stable atmospheric boundary layer -- Asymmetric Continuum Theory: Fracture Processes in Seismology and Extreme Fluid Dynamics -- Time scales: Towards Extending the Finite Difference Technique for Non-homogeneous Grids.

Sommario/riassunto

Over the last six decades, the field of geophysics has experienced rapid development. Seismic methods, magnetic studies, hydrology and atmospheric sciences have expanded thanks to a boom in the computer sciences and measurement techniques. The frontiers of geophysics have also expanded, now including research on the polar areas, both Arctic and Antarctic. All these events are clearly reflected in the 60-year-long history of the Institute of Geophysics, Polish Academy of Sciences. This volume describes the most prominent achievements, the history of research and also the future potential of the Institute of Geophysics PAS. It describes measurements in various projects, methods of interpreting scientific data, and last but not least the people who have driven this research in many scientific projects.