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Autore	Parmar Arvind
Titolo	ESA Science Programme Missions : Contributions and Exploitation / / by Arvind Parmar, Roger-Maurice Bonnet, Guido De Marchi, Pedro García-Lario, Erik Kuulkers, Göran Pilbratt, Celia Sánchez-Fernández, Maria Santos-Lleó, Norbert Schartel, John Zarnecki ; edited by Arvind Parmar
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Altri autori (Persone)	BonnetRoger-Maurice De MarchiGuido García-LarioPedro KuulkersErik PilbrattGöran Sánchez-FernándezCelia Santos-LleóMaria SchartelNorbert ZarneckiJohn
Disciplina	629.4
Soggetti	Outer space - Exploration Astronautics Aerospace engineering Astronomy Space Exploration and Astronautics Aerospace Technology and Astronautics Astronomy, Cosmology and Space Sciences
Lingua di pubblicazione	Inglese
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Nota di contenuto	1 The ESA Science Programme -- 2 ESA Mission Publications and Their Impact -- 3 Payload Provision to the ESA Science Programme -- 4 XMM-Newton Observing Time Proposals -- 5 INTEGRAL Observing Time Proposals -- 6 Herschel Observing Time Proposals -- 7

Conclusions.

Sommario/riassunto

This work got its start by trying to answer the question "how do you evaluate the scientific performance of the ESA's Science Programme missions?" For many years, the decision makers responsible for the content of the ESA Science Programme have been provided with information for each mission including, but not limited to, the number of publications published, the number of publications that are highly cited, the total number of citations used, various statistical metrics and the number of unique author names. However, this reporting only provides snapshots of these missions and was not widely distributed. In this book, we report on a systematic study of these metrics and their evolution with time to provide insights into mission successes and the communities exploiting the data provided by the Science Programme’s missions. In addition, we examine the outcomes of the announcements of observing opportunities for ESA’s observatory missions, INTEGRAL, Herschel and XMM-Newton to provide insights into the evolutions of the user communities with time, location and gender. Finally, we examine the provision of payload elements for ESA’s Science Programme missions. We use the number of payload investigators to give insights into the levels of contribution and exploitation of the different ESA Member States. This book is open access under a CC BY license.

2. Record Nr. UNINA9910887892603321

Autore	Oertel Frank
Titolo	Upper Bounds for Grothendieck Constants, Quantum Correlation Matrices and CCP Functions / / by Frank Oertel
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ISBN	3-031-57201-7
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (238 pages)
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Soggetti	Functional analysis Probabilities Mathematical physics Mathematical optimization Functional Analysis Probability Theory Mathematical Physics Optimization
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
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Nota di contenuto	- Introduction and motivation -- Complex Gaussian random vectors and their probability law -- A quantum correlation matrix version of the Grothendieck inequality -- Powers of inner products of random vectors, uniformly distributed on the sphere -- Completely correlation preserving functions -- The real case: towards extending Krivine's approach -- The complex case: towards extending Haagerup's approach -- A summary scheme of the main result -- Concluding remarks and open problems -- References -- Index.
Sommario/riassunto	This book concentrates on the famous Grothendieck inequality and the continued search for the still unknown best possible value of the real and complex Grothendieck constant (an open problem since 1953). It describes in detail the state of the art in research on this fundamental inequality, including Krivine's recent contributions, and sheds light on related questions in mathematics, physics and computer science, particularly with respect to the foundations of quantum theory and quantum information theory. Unifying the real and complex cases as

much as possible, the monograph introduces the reader to a rich collection of results in functional analysis and probability. In particular, it includes a detailed, self-contained analysis of the multivariate distribution of complex Gaussian random vectors. The notion of Completely Correlation Preserving (CCP) functions plays a particularly important role in the exposition. The prerequisites are a basic knowledge of standard functional analysis, complex analysis, probability, optimisation and some number theory and combinatorics. However, readers missing some background will be able to consult the generous bibliography, which contains numerous references to useful textbooks. The book will be of interest to PhD students and researchers in functional analysis, complex analysis, probability, optimisation, number theory and combinatorics, in physics (particularly in relation to the foundations of quantum mechanics) and in computer science (quantum information and complexity theory).