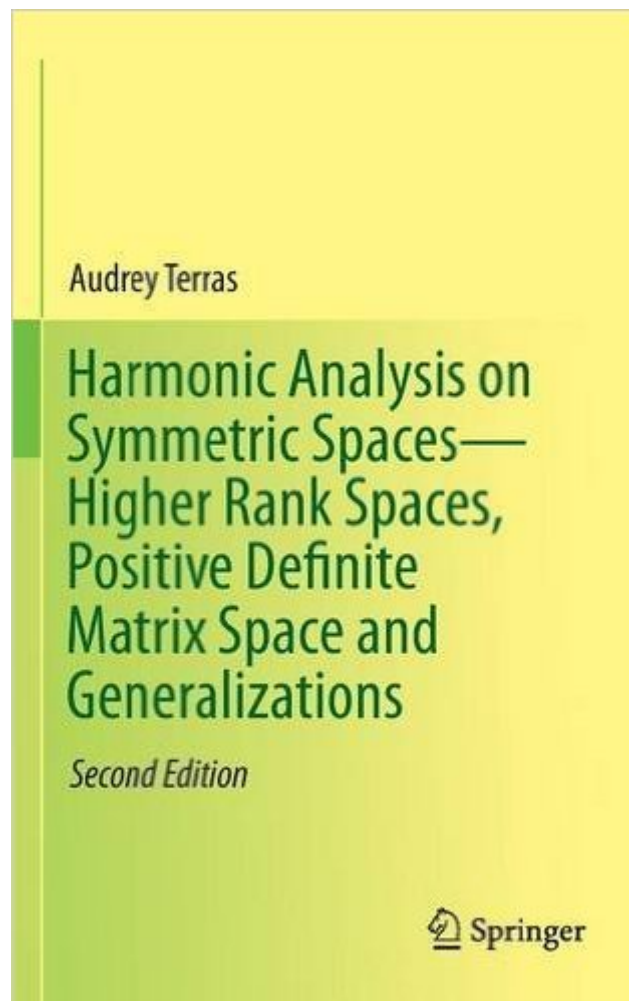


The book was found

# Harmonic Analysis On Symmetric Spaces\_Higher Rank Spaces, Positive Definite Matrix Space And Generalizations



## Synopsis

This text is an introduction to harmonic analysis on symmetric spaces, focusing on advanced topics such as higher rank spaces, positive definite matrix space and generalizations. It is intended for beginning graduate students in mathematics or researchers in physics or engineering. As with the introductory book entitled "Harmonic Analysis on Symmetric Spaces - Euclidean Space, the Sphere, and the Poincaré Upper Half Plane, the style is informal with an emphasis on motivation, concrete examples, history, and applications. The symmetric spaces considered here are quotients  $X=G/K$ , where  $G$  is a non-compact real Lie group, such as the general linear group  $GL(n,P)$  of all  $n \times n$  non-singular real matrices, and  $K=O(n)$ , the maximal compact subgroup of orthogonal matrices. Other examples are Siegel's upper half "plane" and the quaternionic upper half "plane". In the case of the general linear group, one can identify  $X$  with the space  $P_n$  of  $n \times n$  positive definite symmetric matrices. Many corrections and updates have been incorporated in this new edition. Updates include discussions of random matrix theory and quantum chaos, as well as recent research on modular forms and their corresponding L-functions in higher rank. Many applications have been added, such as the solution of the heat equation on  $P_n$ , the central limit theorem of Donald St. P. Richards for  $P_n$ , results on densest lattice packing of spheres in Euclidean space, and  $GL(n)$ -analogs of the Weyl law for eigenvalues of the Laplacian in plane domains. Topics featured throughout the text include inversion formulas for Fourier transforms, central limit theorems, fundamental domains in  $X$  for discrete groups  $\hat{\Gamma}$  (such as the modular group  $GL(n,Z)$  of  $n \times n$  matrices with integer entries and determinant  $\hat{\Delta} = 1$ ), connections with the problem of finding densest lattice packings of spheres in Euclidean space, automorphic forms, Hecke operators, L-functions, and the Selberg trace formula and its applications in spectral theory as well as number theory.

## Book Information

Hardcover: 487 pages

Publisher: Springer; 2nd ed. 2016 edition (April 27, 2016)

Language: English

ISBN-10: 1493934066

ISBN-13: 978-1493934065

Product Dimensions: 6.1 x 1.1 x 9.2 inches

Shipping Weight: 2 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #1,665,892 in Books (See Top 100 in Books) #106 in Books > Science &

Math > Mathematics > Infinity #257 inÂ Books > Science & Math > Mathematics > Pure Mathematics > Group Theory #300 inÂ Books > Science & Math > Mathematics > Pure Mathematics > Algebra > Abstract

[Download to continue reading...](#)

Harmonic Analysis on Symmetric Spaces\_Higher Rank Spaces, Positive Definite Matrix Space and Generalizations Positive Discipline for Preschoolers: 10 Tips on Making Your Child Responsible and Confident (Positive Discipline, Positive Discipline for Preschoolers, Positive Discipline In The Classroom) The Symmetric Group: Representations, Combinatorial Algorithms, and Symmetric Functions (Graduate Texts in Mathematics, Vol. 203) Positive Thinking: How to Eliminate Negative Thinking and Gain Success, Health and Happiness Through Positive Thinking and Self-empowering Affirmations (Positive Thinking Everyday Book 1) Positive Parenting: How to talk to your kids so they listen...Your guide to everything you need to know about positive parenting and raising children to ... Positive Discipline, Parenting Books) Differential Geometry, Lie Groups, and Symmetric Spaces, Volume 80 (Pure and Applied Mathematics) A Survey of Matrix Theory and Matrix Inequalities (Dover Books on Mathematics) The Essential Guide to the ACT Matrix: A Step-by-Step Approach to Using the ACT Matrix Model in Clinical Practice How to Rank in YouTube: How to get more Views on Youtube (Volume 2) More Views Please - 21 Secrets For Getting Any YouTube Video To Rank #1 Stochastic Models, Information Theory, and Lie Groups, Volume 2: Analytic Methods and Modern Applications (Applied and Numerical Harmonic Analysis) Selected Unsolved Problems in Coding Theory (Applied and Numerical Harmonic Analysis) Classical and Multilinear Harmonic Analysis (Cambridge Studies in Advanced Mathematics) (Volume 1) Harmonic Analysis: From Fourier to Wavelets (Student Mathematical Library) An Introduction to Harmonic Analysis A Course in Abstract Harmonic Analysis, Second Edition (Textbooks in Mathematics) An Introduction to Harmonic Analysis (Cambridge Mathematical Library) Complex Harmonic Analysis Positive Thinking: How to Rewire Your Brain with Positive Thinking and Self-Empowering Affirmations to Finally Achieve Success and Freedom Positive Options for Living with COPD: Self-Help and Treatment for Chronic Obstructive Pulmonary Disease (Positive Options for Health)

[Dmca](#)