Sudan University of Science and Technology

College of Science

Impact of Eigenspaces on Hyperbolic Spaces and Formal Dimension with Limit of Period Integrals on Symmetric

Spaces

اثر الفضاءات الذاتيه على الفضاءات الزائديه والبعد المكون طبقا لنهاية تكاملات الفترة على الفضاءات التماثل

A thesis Submitted in Partial Fulfillment for the Degree of M.Sc. in Mathematics

By

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August (2008)

Dedication

To my father,,

Mother,,

Bather, and

Sisters .

Acknowledgment

I am gratefully thanks my teacher and supervisor Dr. Shawgy Hussein AbdAlla to the help, preparation, completion of this research, and support offered. Especial thanks to the Vice chancellor of the Sudan University of Science and Technology for the gift of the Scholarship through the Sudan south Islamic Organization. Also my deepest gratitude owed to my friends. I am deeply indebted to all staff of typists those help me to finish this study.

Abstract

We give a complete description of all closed G-invariant subspace of the eigenspace. The eigenspace representation are compare with principal series representation , using Poisson-transformation. We show and compute the formal dimension for semisimple symmetric spaces.

We introduce the stabilizer of one - dimension positive definite subspace of the Hermition period integrals of outomorphic forms on the quotient of informal lattice and the unitary group of anon-degenerate Hermition space.

الخلاصه

تم اعضاء وصف تام لكل الفضاءات الجزئيه اللامتغيرة-المغلقه من الفضاء الذاتى. لتمثيلات المتسلسله الرئيسيه باستخدام تحويلات-بواسون. تم ايضاح و حساب البعد الشكلى لأجل الفضاءات المتماثله شبه البسيطة.

تم ادخال توطيد الفضاء الجزئى المحدد الموجب ذى البعد- الواحد من الفضاء الهيرميتى لتكاملات الفترة من الصيغ التحليليه على قسمة الشبكه المنتظمه و الزمرة الواحدايه من الفضاء الهيرميتى غير المنحل.

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