

Dedication

This thesis is dedicated to my mother and

The memory of my father who have
supported me all the way

.Since the beginning of my studies

Also This thesis is dedication to my sisters for

Their endless support and
.encouragement

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Abstract

We show an approximation of Hardy function on compact Lie groups by the methods of Bochner-Riesz mean. We establish the Sharp Garding inequality on compact Lie groups. The positivity condition is expressed in the non-commutative phase space in terms of the full matrix symbol, which is defined using the representation of the group. Fefferman and Stein and

L^p

Wainger proved optimal boundedness for certain oscillating multipliers on the Euclidean space. We develop the functional calculus for elliptic operators on compact Lie groups without the assumption that the operator is a classical pseudo-differential operator. Consequently, we provided asymptotic description of complex powers of such operators

الخلاصة

أوضحنا تقريب دول هاردي على زمري المتراسة بواسطة طرق أوسلر بوشنر- ريس .تم تأسيس متباينة قارحن القاطعة على زمري المتراسة . شرط الموجبية يعبر عنه فى فضاء الفترة غير التبديلي بعلامات رمز المصفوفة الكمل و الذى هو يعرف بـ استخدام تمثيل

الزمرة .أثبت فيفرمان و ستن و وانجر محدودية L^p ألامثلية لاجل

مضاعفات التذبذبات المعينه على الفضاء الاقليدي.تم تطوير الحسبان الدالى للمؤثرات الناقصية على زمري المتراسة بدون ألفرض أن المؤثر هو مؤثر شبه تفاضلى تقليدي.نتيجة لذلك تم اشتراط وصف رمزي للأسيات المركبة من مثل هذه المؤثرات.

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