

Recent Activities

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1 Paper in preparation

Siegel Upper Half Space

Siegel's book 'Symplectic Geometry' studies complex combinations $X + iY$ where X, Y are symmetric n by n matrices with Y positive definite. We consider combinations of symmetric matrices using generators of the Clifford algebra $X + \sum_{i=1}^n Y_i e_i$. Here Y_n is positive definite. Both the symplectic group and the Valen group act on these spaces.

2 Work in progress

Siegel operator space.

We replace the symmetric n by n matrices above with self adjoint bounded linear operators on a Hilbert space.

3 Review in progress

L_p Description of Carleson-Newman Blaschke Products in Besov Type Spaces, Acta Mathematica Scientia. Author cites motivation from C. Nolder, An L^p definition of interpolating Blaschke products, Proc. Am. Math. Soc. 128(2000), 1799-1806.

4 Dis

Anna Rakhmanov was a student in my Number Theory class. She wished to learn more of this subject. This has lead us to study complex analysis as preparation for analytic number theory.

5 Courses

5.1 Spring 2023

MAA 5617 Measure and Integration II
MAP 2302 Ordinary Differential Equations

5.2 Fall 2022

MAA 4402 Complex Variables
MAA 5616 Measure and Integration I
MAT 4906 Directed Individual Study

5.3 Summer 2022

MAP 2302 Ordinary Differential Equations
MGF 3301 Intro. to Advanced Mathematics

5.4 Spring 2022

MAA 5932 Analysis Topics
MAS 4203 Theory of Numbers