

1. Record Nr.	UNINA9910760295503321
Autore	Bruggeman Roelof W
Titolo	Representations of $SU(2,1)$ in Fourier Term Modules / / by Roelof W. Bruggeman, Roberto J. Miatello
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2023
ISBN	9783031431920 3031431928
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (217 pages)
Collana	Lecture Notes in Mathematics, , 1617-9692 ; ; 2340
Altri autori (Persone)	MiatelloRoberto J
Disciplina	515.2433
Soggetti	Number theory Fourier analysis Topological groups Lie groups Number Theory Fourier Analysis Topological Groups and Lie Groups
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>This book studies the modules arising in Fourier expansions of automorphic forms, namely Fourier term modules on $SU(2,1)$, the smallest rank one Lie group with a non-abelian unipotent subgroup. It considers the “abelian” Fourier term modules connected to characters of the maximal unipotent subgroups of $SU(2,1)$, and also the “non-abelian” modules, described via theta functions. A complete description of the submodule structure of all Fourier term modules is given, with a discussion of the consequences for Fourier expansions of automorphic forms, automorphic forms with exponential growth included. These results can be applied to prove a completeness result for Poincaré series in spaces of square integrable automorphic forms. Aimed at researchers and graduate students interested in automorphic forms, harmonic analysis on Lie groups, and number-theoretic topics related to Poincaré series, the book will also serve as a basic reference on</p>

spectral expansion with Fourier-Jacobi coefficients. Only a background
in Lie groups and their representations is assumed.
