Search or Article-id

All papers | Go!

Mathematics > Number Theory

Invariant Differential Operators on Siegel-Jacobi Space

Jae-Hyun Yang

(Submitted on 4 Jul 2011)

For two positive integers m and n, we let ${\mathbb H}_n$ be the Siegel upper half plane of degree n and let ${\mathbb C}^{(m,n)}$ be the set of all $m\times n$ complex matrices. In this article, we study differential operators on the Siegel-Jacobi space ${\mathbb H}_n\times {\mathbb C}^{(m,n)}$ that are invariant under the natural action of the Jacobi group $Sp(n,{\mathbb R} \ltimes H_{\mathbb R}^{(n,m)}$ on ${\mathbb H}_n\times {\mathbb C}^{(m,n)}$, where $H_{\mathbb R}^{(n,m)}$ denotes the Heisenberg group. We give some explicit invariant differential operators. We present important problems which are natural. We give some partial solutions for these natural problems.

Comments:	32 pages. arXiv admin note: substantial text overlap with arXiv:arXiv:math/0611389
Subjects:	**Number Theory (math.NT)**
MSC classes:	13A50, 32Wxx, 15A72
Cite as:	**arXiv:1107.0509 [math.NT]**
	(or **arXiv:1107.0509v1 [math.NT]** for this version)

Submission history

Which authors of this paper are endorsers?

Download:

- PDF
- PostScript
- Other formats

Current browse context:
math.NT
< prev | next >
new | recent | 1107

Change to browse by:

math

References & Citations

- NASA ADS

Bookmark (what is this?)