

THE FOURIER TRANSFORM ON SEMISIMPLE LIE GROUPS OF REAL RANK ONE

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1. Introduction

Let G be a connected semisimple Lie group with finite center and let K be a maximal compact subgroup of G . We assume that $\text{rank}(G) = \text{rank}(K)$ and that $\text{rank}(G/K) = 1$. Let T be a Cartan subgroup of G contained in K . We write \mathfrak{G} for the Lie algebra of G and $\mathfrak{G}_{\mathbb{C}}$ for the complexification of \mathfrak{G} . If $G_{\mathbb{C}}$ is the simply connected, complex analytic group corresponding to $\mathfrak{G}_{\mathbb{C}}$, we assume that G is the real analytic subgroup of $G_{\mathbb{C}}$ corresponding to \mathfrak{G} .

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