QUANTIZATION OF THE 4-DIMENSIONAL NILPOTENT ORBIT OF SL(3, \mathbb{R})

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ABSTRACT. We give a new geometric model for the quantization of the 4-dimensional conical (nilpotent) adjoint orbit $O_R$ of SL(3, \mathbb{R}). The space of quantization is the space of holomorphic functions on $\mathbb{C}^2 - \{0\}$ which are square integrable with respect to a signed measure defined by a Meijer $G$-function. We construct the quantization out of a non-flat Kaehler structure on $\mathbb{C}^2 - \{0\}$ (the universal cover of $O_R$) with Kaehler potential $\rho = |z|^4$. 

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