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Title:	Local Coordinates for Complex and Quaternionic Hyperbolic Pairs
Authors:	Gongopadhyay, Krishnendu (/jspui/browse?type=author&value=Gongopadhyay%2C+Krishnendu)
Keywords:	Character variety Complex hyperbolic space
Issue Date:	2022
Publisher:	Cambridge University Press
Citation:	Journal of the Australian Mathematical Society, 113(1), 57–78.
Abstract:	Let $G(n)=\mathrm{Sp}(n,1)$ or $\mathrm{SU}(n,1)$. We classify conjugation orbits of generic pairs of loxodromic elements in $G(n)$. Such pairs, called 'nonsingular', were introduced by Gongopadhyay and Parsad for $\mathrm{SU}(3,1)$. We extend this notion and classify $G(n)$ -conjugation orbits of such elements in arbitrary dimension. For $n=3$, they give a subspace that can be parametrized using a set of coordinates whose local dimension equals the dimension of the underlying group. We further construct twist-bend parameters to glue such representations and obtain local parametrization for generic representations of the fundamental group of a closed (genus $g \geq 2$) oriented surface into $G(3)$.
Description:	Only IISER Mohali authors are available in the record.
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