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Generalised Complex Structures on Products of Lie Groups

Let M be an even-dimensional manifold, and let H be a closed three-form on M . An H -twisted generalised complex structure on M is an endomorphism of $TM \oplus T^*M$ which squares to -1 , preserves the natural pseudometric of $TM \oplus T^*M$, and whose i -eigenbundle is closed under the H -twisted Dorfman bracket. A natural question is given a fixed closed three-form H on M , does there exist an H -twisted generalised complex structure on M ? We explore this question for products of simple Lie groups. This is motivated by Marco Gualtieri's result that any even-dimensional semisimple Lie group admits a generalised complex structure.