

# GLOBAL SOLVABILITY OF DIFFERENTIAL OPERATORS ON COMPACT MANIFOLDS

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ABSTRACT. Our goal is to talk about some results regarding differential operators defined on compact manifolds proved in [1]. We will start discussing how a weak notion of global hypoellipticity implies global solvability. In the sequence we consider a model of differential operators of type sum of squares defined on a product of two compact manifolds and we give some necessary and sufficient conditions for global solvability of these operators.

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## REFERENCES

- [1] G. Araújo, I.A. Ferra, and L.F. Ragognette. Global solvability and propagation of regularity of sums of squares on compact manifolds. *J. Anal. Math*, 148, 85–118, 2022.

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