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Abstracts of Short Communications and Posters

Section:

5. Differential Geometry and Global Analysis

1991 MS Classification: 46, 57, 58
Kopylov, Yaroslav, Sobolev Institute of Mathematics, Novosibirsk, Russia
Normal solvability of the operator of exterior derivation on some surfaces in $\mathbb{R}^N$
The operator d of exterior derivation is studied on a smooth surface of revolution M in $\mathbb{R}^N$. The operator d is considered as an unbounded one defined on a subspace of the Banach space of measurable differential forms on M having their modulus integrable to the power $p \geq 1$. Some conditions of normal solvability of d are presented (a linear operator is called *normally solvable* if its range is closed).
Reference: Ya. A. Kopylov, On normal solvability of the operator of exterior derivation on a surface of revolution, *Siberian Math. J.* **38** (1997), No. 6, 1300–1307.