Drachal, Krzysztof; **Vandana**
Some algebraic aspects of the gluing of differential spaces. (English) Zbl 07251326
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Differential spaces introduced by *R. Sikorski* [Colloq. Math. 18, 251–272 (1967; Zbl 0162.25101); Colloq. Math. 24, 45–79 (1971; Zbl 0226.53004)] were generalized by several authors to include more general cases [*K. Spallek*, Math. Ann. 180, 269–296 (1969; Zbl 0169.52901); *M. A. Mostow*, J. Differ. Geom. 14, 255–293 (1979; Zbl 0427.58005)]. The author has already discussed, within the framework of Sikorski's differential spaces, gluing of differential spaces. This paper aims to investigate algebraic aspects of the gluing procedure within the category of differential spaces. The algebraic techniques are chiefly based upon the spectral approach.

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MSC:

58A40   Differential spaces
13N15   Derivations and commutative rings

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differential spaces; generalization of a smooth manifold; gluing of differential spaces; singular spaces; spectral algebras

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