

**THE LEIBNIZ FORMULA FOR THE COVARIANT
DERIVATIVE AND SOME OF ITS APPLICATIONS***A. V. Gavrilov*

We obtain a formula for the higher covariant derivatives on the tensor product of vector bundles which is a wide generalization of the classical Leibniz formula. We construct an algorithm for the calculation of the part of the Taylor series of the double exponential map linear with respect to the second variable.

Key words and phrases: affine connection, connection on a vector bundle, higher covariant derivatives, composition of exponential maps.

Gavrilov Aleksej Vladimirovich
Siberian Independent Institute,
Novosibirsk, 630082 Russia.
E-mail: gavrilov19@gmail.com

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