

## **Affine connections on three-dimensional pseudo-Riemannian homogeneous spaces. II**

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### **Abstract**

We describe all invariant affine connections on three-dimensional pseudo-Riemannian homogeneous spaces. We present the complete local classification of pseudo-Riemannian homogeneous spaces. It is equivalent to the description of effective pairs of Lie algebras supplied with an invariant nondegenerate symmetric bilinear form on the isotropy module. We describe all invariant affine connections on pseudo-Riemannian homogeneous spaces together with their curvature and torsion tensors and single out pseudo-Riemannian connections. © 2014 Allerton Press, Inc.

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### **Keywords**

invariant affine connection, pseudo-Riemannian homogeneous space