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Some applications of Kirichenko tensors. (English) Zbl 1212.53045
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Summary: A short description of structural and virtual Kirichenko tensors that form a complete system of first-order differential-geometrical invariants of an arbitrary almost Hermitian structure is given. In two ways it is proved that an almost Hermitian structure is integrable if and only if its structural Kirichenko tensors vanish. A characterization of Gray-Hervella classes of almost Hermitian structures in terms of Kirichenko tensors is given.

MSC:

53C10 *G*-structures

Cited in **13** Documents

Keywords:

almost Hermitian structure; Nijenhuis tensor; Kirichenko tensors; Gray-Hervella classification; integrable structure