## CONJUGATE CONNECTIONS AND STATISTICAL STRUCTURES ON ALMOST NORDEN MANIFOLDS

## Marta Teofilova

**Abstract.** Relations between conjugate connections with respect to the pair of Norden metrics and to the almost complex structure on almost Norden manifolds are studied. Conjugate connections of the Levi-Civita connections induced by the Norden metrics are obtained. Statistical structures on almost Norden manifolds are considered.

**Key words:** Norden metric, complex structure, conjugate connection, dual connection, complex conjugate connection, statistical manifold.

## Mathematics Subject Classification: 53C15, 53C50, 32Q60

Marta Teofilova<sup>1,\*</sup> <sup>1</sup> Paisii Hilendarski University of Plovdiv, Faculty of Mathematics and Informatics, 236 Bulgaria Blvd., 4003 Plovdiv, Bulgaria \* Corresponding author: marta@uni-plovdiv.bg