Title: Semi-invariant submanifolds of $K$-manifolds

Author(s): Luigia Di Terlizzi, Francesca Verroca and Robert A. Wolak

We are concerned with $K$-manifolds which are a natural generalization of metric quasi-Sasakian manifolds. They are Riemannian manifolds with a compatible $f$-structure which admits a parallelizable kernel, have closed Sasaki 2-form and verify a certain normality condition. We study semi-invariant submanifolds of a $K$-manifold and investigate the integrability of the various distributions involved. We also study the normality of semi-invariant submanifolds and present a significant example.

Address:
Luigia Di Terlizzi
Università di Bari
Dipartimento di Matematica
Via E. Orabona 4
70125 Bari
Italy

Address:
Francesca Verroca
Università di Bari
Dipartimento di Matematica
Via E. Orabona 4
70125 Bari
Italy

Address:
Robert A. Wolak
Instytut Matematyki
Uniwersytet Jagielloński
Lojasiewicza 6
30 348 Kraków
Poland