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Abstracts of Short Communications and Posters

Section:

5. Differential Geometry and Global Analysis

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Koda, Takashi, Toyama University, Japan
Weakly symmetric property of Riemannian 3-symmetric spaces.
The notion of weakly symmetric spaces has been introduced by A. Selberg. Recently, their geometric characterizations are given by J. Berndt and L. Vanhecke, and a useful one by W. Ziller. We first show that if a nearly Kähler manifold is weakly symmetric and its pseudo-holomorphic isometry group acts transitively on it, then it is a Riemannian 3-symmetric space. And then it will be presented that some classes of Riemannian 3-symmetric spaces satisfy weakly symmetric property or not. This is joint work with L. Vanhecke and Y. Watanabe.
Reference: J. Berndt and L. Vanhecke, Geometry of weakly symmetric spaces, *J. Math. Sci. Japan,* **48** (1996), 745–760.
W. Ziller, Weakly symmetric spaces, *Topics in Geometry: In Memory of Joseph D'Atri*, S. Gindikin ed., Birkhäuser, Boston, 1996, pp.355–368.