Workshop on "Geometry of vector distributions, differential equations, and variational problems"

Abstracts of the posters

Quaternionic analogue of CR structure and its pseudoconvexity

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I will introduce quaternionic analogues of CR and pseudohermitian structures and their strong pseudoconvexity. Furthermore, I will explain the existence of a connection for quaternionic pseudohermitian structure, which stands for an analogue of the Tanaka-Webster connection, under certain conditions for convexity. On the other hand, O. Biquard gave the notion of quaternionic contact structure, which is another quaternionic analogue of CR structure. I will also explain difference between our structure and Biquard's one. This is a joint work with Shin Nayatani.