

Miroslav Kureš: Semiholonomic Velocities and Contact Elements: An Algebraic Approach I, II

In the first part of the workshop, we explain the basic concepts and results related to Weil bundles. We will focus on nonholonomic and semiholonomic velocities and the corresponding Weil algebras. In the second part, we will study Weil contact elements. The whole workshop will be interspersed with references to geometric problems, in particular to liftings of geometric objects, and possible applications in physics will be mentioned, too.

Selected author's papers related to the topic from the most recent period:

Kureš, M., Weil algebras associated to functors of third order semiholonomic velocities, *Mathematical Journal of Okayama University*, Vol.56, (2014), No.1, pp.117-127, ISSN 0030-1566, Okayama University

Kureš, M., On some directions in the development of jet calculus, *Banach Center Publications*, Vol.93, (2011), No.1, pp.251-260, ISSN 0137-6934, IM PAN

Kureš, M., Fixed point subalgebras of Weil algebras: from geometric to algebraic questions, *Complex and Differential Geometry*, pp.183-192, ISBN 978-3-642-20299-5, (2011), Springer