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

SISSA, Trieste, Italy, 13–15 December 2006 Abstracts of the talks

Michail Zhitomirskii (Technion -Israel Institute of Technology, Israel) $Exact\ normal\ form\ for\ (2,5)\ distributions$

I will present a complete solution of the classical problem on reduction of generic (2,5) distributions to a normal form whose parameters are a complete system of independent invariants. The starting points is as follows: the Cartan invariant is a complete invariant in the classification of 3-quasi-jets of (2,3,5) distributions with respect to the natural weights 1,1,2,3,3.