A tour among Engel structures

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Abstract: Engel structures are maximally non-integrable 2-distributions in 4-manifolds (i.e. 2-distributions which are bracket generating). In this survey talk I would present the most important results in the theory of Engel manifolds and some new developments. More precisely I shall speak about some properties of the characteristic foliation of such distributions, I shall introduce the defining 1-forms associated to Engel structures and I shall present the principal existence results due to Vogel and to Casals, Perez et al..