

SYMMETRY CLASSIFICATION OF CURVATURE EVOLUTIONS

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Starting from an action of a Lie-group on a manifold the Fels-Olver moving frame method provides a set of generating invariants together with their syzygies. One of the syzygies gives us the evolution of curvature invariants if the evolution of a curve is specified. Another syzygy gives us an invariant symmetry condition which we utilise to identify integrable curvature evolutions.

Joint work with Evelyne Hubert (INRIA Méditerranée, Sophia Antipolis, France).