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***Liftings of vector fields to 1-forms on the  $r$ -jet prolongation of the cotangent bundle***

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**Abstract:** For natural numbers  $r$  and  $n \geq 2$  all natural operators  $T|_{\mathcal{M}f_n} \rightsquigarrow T^*(J^r T^*)$  transforming vector fields from  $n$ -manifolds  $M$  into 1-forms on  $J^r T^* M = \{j_x^r(\omega) \mid \omega \in \Omega^1(M), x \in M\}$  are classified. A similar problem with fibered manifolds instead of manifolds is discussed.

**Keywords:** natural bundle, natural operator

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