Loday symbol, Countou–Carrère symbol, and reciprocity

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The talk is based on a joint work with D. Osipov. We recall a symbol in algebraic K-groups constructed by Loday, its basic properties, and a relation between differential forms and tangent space to K-theory provided by the Loday symbol. This allows to give an explicit formula for higher Countou–Carrère symbol defined in terms of the delooping of K-theory. Finally, we state a reciprocity law for the higher Countou–Carrère symbol.