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**Maxim Zyskin\*** (Maxim.Zyskin@utb.edu). *Fundamental differential form and boundary value problems for PDEs.*

We describe constructive realization of Ehrenpreis fundamental principle, in terms of fundamental differential form. We use such form to obtain Ehrenpreis representation of solutions of boundary value problems for linear constant coefficient PDEs. We apply this method to solve and analyze boundary value problems with applications. (Received September 22, 2011)