The Invariant Laplacian

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The usual Laplacian can be factored into first order Dirac operators. This is the reason for the link between Clifford analysis and harmonic analysis. The invariant Laplacian on the unit ball in $\mathbb{R}^n$ is a linear combination of the usual Laplacian and the Euler operator. The invariant Laplacian is associated with the hyperbolic geometry of the ball and is invariant under Möbius transformations of the ball. Solutions of the invariant Laplacian have series representations which involve hypergeometric functions. We discuss factorizations of the invariant Laplacian.