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INFORMATION GEOMETRY AND SOME DIFFEOMORPHISMS

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The Fisher metric conception as a central one in information geometry has emerged from the study of maximum-likelihood estimator (MLE) which preserves the maximum amount of information. Besides the Fisher metric any statistical manifold should be endowed by a covariant third-order absolutely symmetric tensor. By means of the tensor and the Levi-Civita connection coefficients one could construct so called an alpha-connection. Here we considers alpha-connection metrization problem for exponential family manifolds and explore conformal mappings to obtain a Hessian metric.

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Contents

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