

## Riemannian Invariants and Applications

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### *Abstract*

It is well-known that Riemannian invariants are the intrinsic characteristics of a Riemannian manifold. They affect the behavior in general of the Riemannian manifold. Borrowing a term from Biology, Riemannian invariants are the DNA of Riemannian manifolds.

In order to determine the best way of living for all individuals who live in a best world, new Riemannian invariants were introduced by B.Y. Chen in 1996, playing important roles especially in Submanifold Theory, but also in Physics.

In this talk I shall start with the motivation of the study of Chen invariants. Also, I shall point-out the most important basic results obtained in this field.

### Bibliography:

B.Y. Chen, *Strings of Riemannian invariants, inequalities, ideal immersions and their applications*, 3-rd Pacific Rim. Geom. Conf., Seoul, Korea (1998), 7-60, Internat. Press, Cambridge, MA, USA.

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