

A STUDY OF FUNCTORS ASSOCIATED WITH HOLONOMY TRANSFORMATION GROUP

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Abstract

The aim of this paper is to construct a functor associated with holonomy transformation group as well as investigate this functor.

In this paper we show that

- (i) $\mathcal{H} : \mathbf{EC}' \rightarrow \mathbf{HTC}'$ is a covariant functor;
- (ii) $\mathcal{H} : \mathbf{EC}' \rightarrow \mathbf{HTC}'$ is a same type invariant functor in the sense that this functor is a same homotopy type as well as same homeomorphism type invariant functor; where \mathbf{EC}' and \mathbf{HTC}' are two categories; also
- (iii) Same homotopy type invariant functor \Rightarrow Same homeomorphism type invariant functor.

Key Words : *Category, Covariant functor, Homotopy type, Same type.*

2010 AMS Subject Classification : 55U40, 55P65.

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