

Geometric Formulation of Gauge Theory of Gravity

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Abstract: Differential geometric formulation of quantum gauge theory of gravity is studied in this paper. The quantum gauge theory of gravity is formulated completely in the framework of traditional quantum field theory. In order to study the relationship between quantum gauge theory of gravity and traditional quantum gravity which is formulated in curved space, it is important to set up the geometry picture of quantum gauge theory of gravity. The correspondence between quantum gauge theory of gravity and differential geometry is discussed and the geometry picture of quantum gauge theory of gravity is studied.

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Key words: gauge field, quantum gravity, geometry

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