

图书基本信息

书名：<<宇宙模型中的非参数化及路径积分量子化/DEPARAMETRIZATION AND PATH INTEGRAL>>

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内容概要

In this book, homogeneous cosmological models whose Hamilton-Jacobi equation is separable are deparametrized by turning their action functional into that of an ordinary gauge system. Canonical gauges imposed on the gauge system are used to define a global phase time in terms of the canonical variables of the minisuperspaces. The procedure clearly shows how the geometry of the constraint surface restricts the choice of time. The consequences that this has for path integral quantization are discussed, and the transition amplitude is obtained for relativistic isotropic models, relativistic anisotropic models (Kantowski-Sachs and Taub) and isotropic string cosmologies. A complete chapter about the application of the deparametrization program to the usual canonical quantization scheme is also included.

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