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Nota di contenuto	Contents ; Preface ; Chapter 1 Introduction ; Chapter 2 The gravitational field as a constrained Hamiltonian system ; 2.1 Momentum and Hamiltonian constraints ; 2.2 Minisuperspaces as constrained systems ; 2.3 Quantization ; 2.3.1 Canonical quantization 2.3.2 Path integral quantization Chapter 3 Deparametrization and path integral quantization ; 3.1 The identification of time ; 3.1.1 Gauge fixation and deparametrization ; 3.1.2 Topology of the constraint surface: intrinsic and extrinsic time 3.2 Gauge-invariant action for a parametrized system 3.2.1 End point terms ; 3.2.2 Observables and time ; 3.2.3 Non separable constraints ; 3.3 Path integral ; 3.3.1 General formalism ; 3.3.2 The function f and the reduced Hamiltonian. Unitarity ; 3.4 Examples 3.4.1 Feynman propagator for the Klein-Gordon equation 3.4.2 The ideal clock ; 3.4.3 Transition probability for empty Friedmann-Robertson-Walker universes ; Chapter 4 Homogeneous relativistic cosmologies

; 4.1 Isotropic universes ; 4.1.1 A toy model  
 ; 4.1.2 True degrees of freedom  
 4.1.3 A more general constraint 4.1.4 Extrinsic  
 time. The closed "de Sitter" universe  
 ; 4.1.5 Comment ; 4.2 Anisotropic universes  
 ; 4.2.1 The Kantowski-Sachs universe ; 4.2.2  
 The Taub universe ; 4.2.3 Other anisotropic models  
 ; Chapter 5 String cosmologies  
 5.1 String theory on background fields

## Sommario/riassunto

The problem of time is a central feature of quantum cosmology: differing from ordinary quantum mechanics, in cosmology there is nothing "outside" the system which plays the role of clock, and this makes difficult the obtention of a consistent quantization. A possible solution is to assume that a subset of the variables describing the state of the universe can be a clock for the remaining of the system. Following this line, in this book a new proposal consisting in the previous identification of time by means of gauge fixation is applied to the quantization of homogeneous cosmological models.

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## Titolo

Face Perception across the Life-Span

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## Collana

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## Sommario/riassunto

Face perception is a highly evolved visual skills in humans. This complex ability develops across the life-span, steeply rising in infancy, refining across childhood and adolescence, reaching highest levels in

adulthood and declining in old age. As such, the development of face perception comprises multiple skills, including sensory (e.g., mechanisms of holistic, configural and featural perception), cognitive (e.g., memory, processing speed, attentional control), and also emotional and social (e.g., reading and interpreting facial expression) domains. Whereas our understanding of specific functional domains involved in face perception is growing, there is further pressing demand for a multidisciplinary approach toward a more integrated view, describing how face perception ability relates to and develops with other domains of sensory and cognitive functioning. In this research topic we bring together a collection of papers that provide a shot of the current state of the art of theorizing and investigating face perception from the perspective of multiple ability domains. We would like to thank all authors for their valuable contributions that advanced our understanding of face and emotion perception across development.

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