

# Physics Ph.D. Theses

Supervised by Charles W. Misner

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(except as noted)

- 1 Carl H. Brans 1961 (Princeton University, Prof. R. H. Dicke co-supervisor) *Mach's Principle and a Varying Gravitational Constant*
- 2 Ralph F. Baierlein 1962 (Princeton University) *On the Existence and Properties of Spacelike Hypersurfaces in Quantized General Relativity*
- 3 Lawrence C. Shepley 1965 (Princeton University, Prof. J. A. Wheeler co-supervisor) *SO(3, R)-Homogeneous Cosmologies*
- 4 Walter C. Hernandez Jr. 1966 *Relativistic Descriptions of Material Sources for Gravitational Fields, including Elastic Materials as Sources of Asymmetric Static Fields*
- 5 Richard A. Isaacson 1967 *Gravitational Radiation in the Limit of High Frequency*
- 6 Richard A. Matzner 1967 *Scattering of Massless Scalar Waves by a Schwarzschild "Singularity"*
- 7 C. V. Vishveshwara 1968 *The Stability of the Schwarzschild Metric*
- 8 Samaresh C. Maitra 1968 *A Stationary and Complete, but Unstable, Inhomogeneous Cosmological Solution of Einstein's Equations*
- 9 Michael P. Ryan Jr. 1970 *Qualitative Cosmology: Diagrammatic Solutions for Bianchi Type IX Universes with Expansion, Rotation, and Shear*
- 10 D. M. Chitre 1972 *Investigation of Vanishing of a Horizon for Bianchi Type IX (the Mixmaster) Universe*
- 11 Leslie G. Fishbone 1972 *The Relativistic Roche Problem: Bodies in Equatorial, Circular Orbit around Kerr Black Holes*

- 12 Beverly K. Berger 1972 *A Cosmological Model Illustrating Particle Creation through Graviton Production*
- 13 Reinhard A. Breuer 1973 (Würzburg University, Prof. Rolf Ebert co-supervisor) *Polarization of Gravitational Synchrotron Radiation*
- 14 Paul L. Chrzanowski 1973 (Prof. Dieter Brill co-supervisor) *Gravitational Synchrotron Radiation*
- 15 James M. Nester 1977 *Canonical Formalism and the ECSK Theory*
- 16 James A. Isenberg 1979 *The Construction of Spacetimes from Initial Data*
- 17 William A. Hiscock 1979 *Black Holes and Cosmic Censorship*
- 18 Terrence J. Honan 1986 *The Geometry of Lattice Field Theory*
- 19 Mark D. Somers 1986 *An Investigation of the Strong Equivalence Principle through the use of Freely Falling Geocentric Coordinates*
- 20 Christopher R. Stephens 1986 *On Some Aspects of the Relationship Between Quantum Physics, Gravity and Thermodynamics*
- 21 David R. Fiske 2004 *Numerical studies of constraints and gravitational wave extraction in general relativity*  
<http://hdl.handle.net/1903/1805>
- 22 Conrad Schiff 2005 *Modeling Extended Fluid Objects in General Relativity* <http://hdl.handle.net/1903/2303>