

BIBLIOGRAPHY

Intro: Kuhn: The Nature of Scientific Revolutions

Ch.1 (Newton)

- Epstein, Gedanken Physics (Insight Press, 1983)
- Feynman, Leighton, and Sands; Feynman Lectures on Physics (Addison-Wesley, 1963)
- Hoffman, Relativity and its Roots (Sci.Am., 1983)
- Smoluchowski, The Solar System (Sci.Am., 1983)
- Zeilik, Astronomy, The Evolving Universe (Harper and Row, 1982)

Hawking, Israel 300 Years of Gravitation (Cambridge, 1987) Hewitt, Conceptual Physics  
 Ch.2 (Special Relativity) *Giambattista, The Ideas of Physics*

- Bondi, Relativity and Common Sense (Dover, 1962) *Serway, Modern Physics*
- Einstein, Relativity (Crown, 1961) *(Simons, 1985)*
- Calder, Einstein's Universe (Greenwich House, 1979)
- Feynman (above)

Schwinger, Einstein's Legacy (Sci.Am. 1985) *Berkeley Series*  
*Adair, R., The Great Design (Oxford, 1988)* *Pis. Abraham. Little is the End*  
*Taylor and Wheeler. Spacetime Physics*  
 Ch.3 (General Relativity)

- Misner, Thorne, Wheeler; Gravitation (Freeman, 1973)
- Feynman (above)
- Einstein (above)
- Epstein (above)
- Schwinger (above)
- Adair (above)*

Ch.4 (Black Holes)

- Hawking, "The Quantum Mechanics of Black Holes" Sci.Am.
- Wheeler et al (above)
- Bertalan. Thursday's Universe (Times Books, 1987)*

Ch.5 (QM)

- Feynman, QED, The Strange Theory of Light and Matter (Princeton, 1986)
- Feynman (above)
- Gribbin, In Search of Schrodinger's Cat (Bantam, 1984)
- D'Espagnat, "The Quantum Theory and Reality" Sci.Am. 11/79
- Robinson, "Demonstrating Single Photon Interference," Science v.231 no.4739 p.671
- Feynman, R. + Weinberg S., 1986 Dixie Memorial Lectures (Cambridge, 1987)*

Ch.6 (Particles)

- Gross, Harvey, and Martinec; "Heterotic String" Phys Rev Lett vol 54 #6, p.502
- Waldrop, "String as a Theory of Everything" Science vol 229 #4719
- Leiberman + Schramm. From Quarks to the Cosmos (SciAm, 1984)*

Weinberg, Subatomic Particles (Sci.Am., 1983)  
Harrari, "The Structure of Quarks and Leptons" Sci.Am. 4/83  
Quigg, "Elementary Particles and Forces" Sci.Am. 4/85  
Kolb et al, "The Shadow World of Superstring" Nature 4/4/85  
Trefil, From Atoms to Quarks (Scribners, 1980)

#### Ch.7 (Forces)

Quigg (above)  
Feynman (above)  
Glashow, "Quarks with Color and Flavor" Sci.Am.  
Adler (above)

#### Ch.8 (Unified Theories)

*Review: The 5 Dimensions of Time, Aug. 2, 1986*  
Davies, Superforce (Simon and Schuster, 1984)  
Deubow and Goedecke, "Group Theory and the Postulational Method," in Mathematics: People, Problems, Results (Wadsworth, 1984)  
Green and Schwarz, "Strings" Nature 4/4/85  
Haber and Kane, "Is Nature Sypersymmetric?," Sci.Am. v.254 no.6 p.52 (June 1986)  
Waldrop, "Supersymmetry and Supergravity" Science vol 220 #4596

t'Hooft, "Gauge Theories" Sci.Am. 6/80  
Gorenstein, "The Enormous Theorem" Sci.Am. 12/85  
LeSecco et al, "The Search for Proton Decay" Sci.Am. 6/85  
Freedman et al, "The Hidden Dimensions of Spacetime" Sci.Am. 3/85

Schwarz, "Completing Einstein" Science 85 11/85

*Green, Schwarz, Witten String Theory (V.1) (Cambridge 1987)*  
*Adler (above)*  
*Morixian, A Primer in Elementary Gauge Theory*

#### Ch.9 (Cosmology)

Weinberg, The First Three Minutes (Bantam, 1977)  
Silk, The Big Bang (Freeman, 1980)  
Guth et al, "The Inflationary Universe" Sci.Am. 5/84  
Boyer, "The Classical Vacuum" Sci.Am. 8/85  
Dicus et al, "The Future of the Universe" Sci.Am.  
Trefil, The Moment of Creation (Scribner's, 1983)  
Davies, "The New Physics and the Big Bang" Sky and Telescope 11/85  
Peebles, "The Mean Mass Density of the Universe," Nature v.321 no.6065 (May 1, 1986)  
Vilenkin, "Cosmic Strings and Domain Walls," Physics Reports v.121 no.5 (May 1985)  
Burns, "Very Large Structure in the Universe," Sci.Am. v.255 no.1 (July 1986)  
Wilkinson, "Anisotropy of the Cosmic Blackbody Radiation," Science v.232 no.4557 p.1517

Gribbin, Spacewarps (Delacorte, 1983)

Lederman + Schramm (above)