References of Theoretical Physics CV

Gabriele Cembalo
Università degli Studi di Torino

- Introduction to Computer Techniques for Physics
  - William Shotts, *The Linux Command Line*, downloadable at the link.
- Professional aspects of applied physics
  -
- Introduction to Quantum Field Theory
  - P. Ramond, *Field Theory: A Modern Primer*, Addison Wesley.
  - M.E. Peskin and D.V. Schroeder, *An Introduction to Quantum Field Theory*, Addison Wesley.
  - M. Srednicki, *Quantum Field Theory*, Cambridge University Press.
  - G. Sterman, *An Introduction to Quantum Field Theory*, Cambridge University Press.
  - T. Lancaster and S. J. Blundell, *Quantum Field Theory for the Gifted Amateur*, Oxford University Press.
  - MIchio Kaku, *Quantum Field Theory - A modern introduction*, Oxford University Press.
  - V. Barone, *Relatività - Principi e Applicazioni*, Bollati Boringhieri.
- Foundations of Quantum Field Theory
  - I. Iliopoulos, T. Tomaras, *Elementary Particle Physics: The Standard Theory*, Oxford University Press.
  - P. Ramond, *Field Theory: A Modern Primer*, Addison Wesley.
  - M.E. Peskin and D.V. Schroeder, *An Introduction to Quantum Field Theory*, Addison Wesley.
  - M. Srednicki, *Quantum Field Theory*, Cambridge University Press.
  - G. Sterman, *An Introduction to Quantum Field Theory*, Cambridge University Press.
  - A. Zee, *Quantum Field Theory in a Nutshell*, Princeton University Press.
  - And others...
- Statistical Mechanics

- D. Chandler, *Introduction to Modern Statistical mechanics*, Oxford University press.
- Lev. D. Landau, Evgenih M. Lifsits, *Fisica Teorica V: Fisica statistica*, Editori riuniti.
- Linda E. Reichl, *A modern cours in Statistical Physics*, Wiley.
- R. K. Pathria, Paul D. Beale, *Statistical Mechanics*, Elsevier.
- Kerson Huang, *Meccanica Statistica*, Zanichelli.
- F. Gliozzi, *Meccanica Statistica*, Appunti del Corso (a.a 2011/12).
- E. Fermi, *Thermodynamics*, Dover 1965.
- R.P. Feynman, *Statistical Mechanics: A Set of Lectures*, Advanced Book Classics.
- V. Arnold, *Mathematical methods of classical mechanics*.

- Numerical algorithms
  - S.A. Teukolsky, W. Vetterling and B. Flannery, *Numerical Recipes in C (o Fortran)*, Cambridge University Press, W.H. Press.
  - Donald B. KNUTH, *The Art of Computational Programming*, Addison Wesley Ed.
  - Foley, van Dam, Feiner and Hughes, *Computer Graphics (C o Pascal)*, Addison Wesely Ed.

- Cosmology
  - B. Ryden, *Introduction to Cosmology*, Cambridge University Press.
  - P. Coles, F. Lucchin, *Cosmology: The Origin and Evolution of Cosmic Structure*, John Wiley & Sons.
  - V. Mukhanov, *Physical Foundations of Cosmology*, Cambridge University Press.
  - S. Weinberg, *Cosmology*, Oxford University Press.
  - Joel Franklin, *An Introduction to Gravity*, Cambridge University Press.

- General Relativity
  - S. Weinberg, *Gravitation and Cosmology*, Wiley.
  - S. Carroll, *Spacetime and Geometry*, Benjamin Cummings.
  - B.F. Schutz, *A First Course in General Relativity*. Cambridge University Press.
  - R.M. Wald, *General Relativity*, University Of Chicago Press.
  - C.W. Misner, K. Thorne, J.A. Wheeler, *Gravitation*, Freeman.
  - M. Maggiore, *Gravitational Waves*, Oxford University Press.
  - A.F. Taylor, J.A. Wheeler, *Spacetime Physics*, Freeman.

- Elementary Particle 1

- C. Amsler, *Nuclear and Particle Physics*, IOP Publishing Ltd.
- G.Barr, R.Devenish, R.Walczak, T.Weidberg, *Particle Physics in the LHC Era*, Oxford University Press.
- A. Bettini, *Introduction to Elementary Particle Physics*, Cambridge University Press.
- R. Cahn, G. Goldhaber, *The Experimental Foundations of Particle Physics*, Cambridge University Press.
- S.Braibant, G.Giacomelli, M.Spurio, *Particelle e interazioni fondamentali*, Springer.
- D.Griffiths, *Introduction to Elementary Particle Physics*, 2nd ed., Wiley.
- M.Thomson, *Modern Particle Physics*, Cambridge University Press.
- (EXERCISES) N.Cartiglia - *Manuale di Esercizi in Fisica della Particelle*, Levrotto&Bella.

- Condensate Matter Physics
  - C. Enss, S. Hunklinger, *Low-Temperature Physics*, Springer.
  - J.B. Ketterson, S.N. Song, *Superconductivity*, Cambridge University Press.
  - L. Pitaevskii, S.Stringari, *Bose Einstein Condensation*, Claredon Press, Oxford 2003.

- Advanced Quantum Field Theory
  - G. Sterman, *An Introduction to quantum field theory*, Cambridge, UK, 1993.
  - M. Peskin and D. Schroeder, *An Introduction to quantum field theory*, Addison Wesley, New York, USA, 1995.
  - C. Itzykson and J.B. Zuber, *Quantum Field Theory*, McGraw Hill, New York, USA, (1980).

- Phenomenology of Fundamental Interactions
  - M.E. Peskin and D.V. Schroeder, *An Introduction to Quantum Field Theory*, Addison Wesley.
  - R. K. Ellis, W. J. Striking, and B. R. Webber, *QCD and Collider Physics*, Cambridge University Press.

- Physics beyond the standard model
  - Christ Quigg, *Gauge Theories Of Strong, Weak, And Electromagnetic Interactions*, Princeton University Press, 2nd edition.
  - M.E. Peskin and D.V. Schroeder, *An Introduction to Quantum Field Theory*, Addison Wesley.
  - Scott Willenbrock, *Symmetries of the standard model*. Downloadable at the link.

  - Stephen P. Martin, *A Supersymmetry primer*, Adv.Ser.Direct.High Energy Phys. Downloadable at the link.
  - Stefano Profumo, *An Introduction to Particle Dark Matter*, World Scientific.

- String theory
  - Lectures notes, downloadable at the link.
  - J. Polchinski, *String Theory*, Cambridge University Press.
  - B. Zwiebach, *A First Course in String Theory*, Cambridge University Press.
  - And others...