

## Literature

There is an enormous amount of books on relativity and cosmology, this list (in random order) is not intended to be complete in any sense. It should only be used as a guide, which book is suitable for you depends on your taste and learning style!

### Relativity

1. W. Rindler: *Introduction to Special relativity*, Oxford University Press, Oxford (1991)  
Very clear and concise introduction to SR, suitable for self-study, good book for beginners
2. R.U. Sexl, H.K. Urbantke: *Relativity, Groups, Particles: Special Relativity and Relativistic Symmetry in Field and Particle Physics*, Springer, New York (2001)  
Contains an introduction to SR, covers many advanced topics in SR, good for people who want to learn more about the group structure of SR, maybe not the best choice for a beginner who looks for a book for self-study
3. W. Rindler: *Essential relativity*, Springer, New-York (1977)  
Covers SR and GR, has a basic introduction to cosmology, very clear and concise, suitable for self-study, good book for beginners
4. R. D'Inverno: *Introducing Einstein's Relativity*, Oxford University Press, Oxford (1992)  
Very good self contained introduction to GR, many pictures, suitable for self-study, good book for beginners
5. R. M. Wald: *General Relativity*, University of Chicago Press, Chicago (2002)  
Very good self contained introduction to GR, covers also some more advanced topics, suitable for self-study but maybe not the book every beginner wants to start with
6. S. Weinberg: *Gravitation and cosmology*. Wiley, New York (1972)  
Introduction to many topics in GR and cosmology, covers also some more advanced topics, maybe not the book every beginner wants to start with
7. C.W. Misner, K.S. Thorne, J.A. Wheeler: *Gravitation*. Freeman, San Francisco (1973)  
Encyclopedic book on many aspects of gravitation, covers also advanced topics, suitable for self-study if you have enough time, maybe not the book every beginner wants to start with

## Cosmology

1. P.J.E. Peebles: *Principles of physical cosmology*. Princeton University Press, Princeton (1993)  
Covers many topics of cosmology in a non-technical way, very good for beginners and for self-study
2. J.A. Peacock: *Cosmological physics*. Cambridge University Press, Cambridge (1999)  
Covers many topics in cosmological physics, includes very short introductions to GR as well as QFT, more suitable for reference not for self-study
3. E.W. Kolb, M. S. Turner: *The early universe*. Addison-Wesley, Redwood City (1990)  
Very short introduction to the standard model of cosmology, covers many advanced topics, maybe not very suitable for beginners
4. T. Padmanabhan: *Theoretical astrophysics Volume I: Astrophysical processes*. Cambridge University Press, Cambridge (2000)  
T. Padmanabhan: *Theoretical astrophysics Volume II: Stars and stellar systems*. Cambridge University Press, Cambridge (2001)  
T. Padmanabhan: *Theoretical astrophysics Volume III: Galaxies and cosmology*. Cambridge University Press, Cambridge (2002)  
Three volume course on astrophysics and cosmology, covers many topics, very good for reference, maybe not the best book for self-study