

Lectures on Relativity **Bibliography**

A very good popularized introduction:

Einstein, A. *Relativity: The Special and the General Theory*,

pdf: <https://www.marxists.org/reference/archive/einstein/works/1910s/relative/relativity.pdf>

Online: <https://www.bartleby.com/173/>.

Well explained:,

Hobson, *General Relativity, An Introduction for Physicists*.

[https://wigner.hu/~barta/GRcourse2020/Hobson%20M.P.,%20Efstathiou%20G.P.,%20Lasenby%20A.N.%20-%20GR%20-%20An%20Introduction%20for%20Physicists\(Cambridge,2006\).pdf](https://wigner.hu/~barta/GRcourse2020/Hobson%20M.P.,%20Efstathiou%20G.P.,%20Lasenby%20A.N.%20-%20GR%20-%20An%20Introduction%20for%20Physicists(Cambridge,2006).pdf)

Not easy to read sometime, but an important reference:

Landau, L.D.; Lifchitz, E.M. *The Classical Theory of Fields*;

<https://perso.crans.org/sylvainrey/Biblio%20Physique/Physique/%C3%89lectromagn%C3%A9tisme/%5BLandau%2C%20Lifshitz%5D%2002%20The%20Classical%20Theory%20of%20Fields.pdf>

An another good reference:

Rindler, W. *Relativity: Special, General, and Cosmological*;

[https://nzdr.ru/data/media/biblio/kolxoz/P/PGr/Rindler%20W.%20Relativity.%20special,%20general,%20and%20cosmological%20\(2ed.,%20OUP,%202006\)\(ISBN%200198567324\)\(447s\)_PGr_.pdf](https://nzdr.ru/data/media/biblio/kolxoz/P/PGr/Rindler%20W.%20Relativity.%20special,%20general,%20and%20cosmological%20(2ed.,%20OUP,%202006)(ISBN%200198567324)(447s)_PGr_.pdf)

Good reference also:

Møller, C. *The Theory of Relativity*;

<https://ia800203.us.archive.org/19/items/theoryofrelativi029229mbp/theoryofrelativi029229mbp.pdf>

Ryder, *Introduction to General Relativity*.

[https://www.nzdr.ru/data/media/biblio/kolxoz/P/PGr/Ryder%20L.%20Introduction%20to%20general%20relativity%20\(book%20draft,%20CUP,%202009\)\(ISBN%200521845637\)\(458s\)_PGr_.pdf](https://www.nzdr.ru/data/media/biblio/kolxoz/P/PGr/Ryder%20L.%20Introduction%20to%20general%20relativity%20(book%20draft,%20CUP,%202009)(ISBN%200521845637)(458s)_PGr_.pdf)

James Hartle, *Gravity, An Introduction to Einstein's General Relativity*,

<https://icourse.club/uploads/files/9005b735d08a669d315b415b08aa033984efb646.pdf>

A like a lot this book on SR, I use it regularly, in French. I'm in contact with Claude Semay:

Claude Semay et Bernard Silvestre-Brac, *Relativité restreinte, bases et applications*

<https://perso.crans.org/sylvainrey/Biblio%20Physique/Physique/Relativit%C3%A9/%5BSemay%5D%20Relativit%C3%A9%20restreinte%20-%20Bases%20et%20applications%20-%20Cours%20et%20exercices%20corrig%C3%A9s.pdf>

Very interesting on SR and GR:

Richard Feynman, *six not so easy pieces*.

<https://bayanbox.ir/view/820293910726795729/Six-Not-So-Easy-Pieces.pdf>

One of my GR teachers in Master, lot of good things:
Tourenco, P. *Relativity and Gravitation*; Cambridge University Press: Cambridge, UK, 1997.
I've the paperback French version, but I haven't found the pdf on the web...

My SR teacher in Bachelor degree, I like it, it's fun:
Murat Boratav, Richard Kerner, *Relativité*.
I've the paperback French version, but I haven't found the pdf on the web...

Good, in French, on GR:
Aurélien Barrau, Julien Grain, *Relativité générale*.
I've the paperback French version, but I haven't found the pdf on the web...

A very good book on GR, close to my way to teach, in French:
David SÉNÉCHAL, *Relativité générale*.
<https://savoirs.usherbrooke.ca/bitstream/handle/11143/17058/PHQ615.pdf?sequence=1&isAllowed=y>

Damir Buskulic, notes de cours in French, *Ondes gravitationnelles, aspects théoriques et expérimentaux*,
https://lappweb.in2p3.fr/~buskulic/cours/Notes_cours_Buskulic_Jijel.pdf

You already know, SR:
David Griffiths, *Introduction to Electrodynamics*,
https://nucleares.unam.mx/~martinel/griffiths_4ed.pdf

Blanchet, lot of lectures on relativity on the web, this one in French, I read it because I would like to understand a paper on gravitational waves of the same author, it is very good:
<https://www2.iap.fr/users/blanchet/images/coursRG.pdf>

On lagrangians (no gravitation), French:
Labarthe, *Électrodynamique classique et quantique*, p41

My book on relativity and publications:

Special Relativity, A Geometric Approach
<http://www.voyagepourproxima.fr/SR.pdf>

Einstein's Elevator: World Lines, Michelson–Morley Experiment and Relativistic Paradox
<https://www.mdpi.com/2624-8174/4/3/58>

Rotating disk: new physics discovered alongside the Sagnac effect
<https://iopscience.iop.org/article/10.1088/1402-4896/ad122f>

Sagnac Effect with Non-Zero Mass Particles and Light: the Transition from Classical to Relativistic
<https://www.preprints.org/manuscript/202208.0251/v2>