

Symplectic Geometry

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Bibliography:

Background reading (calculus on manifolds, fibre bundles, Lie theory, de Rham cohomology):

- C.J. ISHAM: *Modern Differential Geometry for Physicists*, 2nd edition, World Scientific, 1999
- I.H. MADSEN, J. TORNEHAVE: *From Calculus to Cohomology*, Cambridge University Press, 1997

Main reference for the lectures:

- A. CANNAS DA SILVA: *Lectures on Symplectic Geometry*, 2nd edition, Springer Verlag, 2008

This textbook is available online at:

<http://www.math.ist.utl.pt/~acannas/Books/lsg.pdf>

Other useful general references:

- V.I. ARNOL'D: *Mathematical Methods of Classical Mechanics*, 2nd edition, Springer Verlag, 1997
- S. BATES, A. WEINSTEIN: *Lectures on the Geometry of Quantization*, American Mathematical Society, 1997
- D. MACDUFF, D. SALAMON: *Introduction to Symplectic Topology*, 2nd edition, Oxford University Press, 1999