

DIFFERENTIAL GEOMETRY (M7110)

This is a list of books and lectures notes that cover the material of the class and also provide further reading.

REFERENCES

- [1] A. Čap, J. Slovák: *Parabolic Geometries I: Background and General Theory*, Math. Surv. and Monographs **154**, AMS 2009; Sections 1.3 and 1.4.
- [2] A. Čap: *Lie Groups* (lecture notes), available at <https://www.mat.univie.ac.at/cap/files/LieGroups.pdf>
- [3] A. Čap: *Geometry of Homogeneous spaces* (lecture notes), available at <https://www.mat.univie.ac.at/cap/files/Geom-Homog.pdf>
- [4] W. Fulton and J. Harris: *Representation Theory: A first Course*, Graduate Texts in Mathematics **129**, Springer, 1991.
- [5] A.W. Knap: *Lie Groups beyond an introduction*, Progress in Mathem. **140**, Birkhäuser, 1996.
- [6] S. Kobayashi and K. Nomizu: *Foundations of Differential Geometry*, Volume I and II, Interscience 1963 and 1969; Chapters II-V and X, XII.
- [7] P. Michor: *Topics in Differential Geometry*, AMS 2008; Chapter II, IV, and V.
- [8] R. S. Millman and Ann K. Stehney: *The geometry of connections*, AMS, Monthly, **80** (1973), 475-500.
- [9] C. Wendl: *Lecture Notes on Bundles and Connections*, available here <https://www2.mathematik.hu-berlin.de/wendl/connections.html>