

**INTRODUCTORY SEMINAR IN AXIOMATIC SET
THEORY 1
SOSE 2019**

VERA FISCHER

This is an introductory proseminar in set theory and it is complementary to the lecture course “Axiomatic Set Theory”. Concepts introduced during the the lectures will be further studied and examined during the proseminar. Material associated to the proseminar and in particular assignments will be regularly posted on the Moodle Website of the course.

The final grade is based on the regular participation in the class and presentation of exercises during the proseminar. Each student should present at least twice during the semester.

The classes are **Thursdays, 9:45 - 11:45** in the KGRC seminar room.

Proseminar 1, 06.03.: We justified the existence of various sets. In addition, we established various properties of the arithmetic operations (addition, multiplication and exponentiation) of the ordinals. Notes from the PS will be available on the Moodle Website.

Further information about the proseminar can be found on its Moodle Website.

REFERENCES

- [1] T. Jech *Set theory*. The third millennium edition, revised and expanded. Springer Monographs in Mathematics. Springer-Verlag, Berlin, 2003. xiv+769 pp
- [2] L. Halbeisen *Combinatorial set theory. With a gentle introduction to forcing*. Springer Monographs in Mathematics. Springer, London, 2012. xvi+453 pp.
- [3] K. Kunen *Set theory*, Studies in Logic (London), 34. College Publications, London, 2011, viii+401 pp.
- [4] K. Kunen *The foundations of Mathematics* London : College Publ. ; 2012 ; Rev. ed..

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