Introductory Math Course for First-Semester Students of Physics Including Future Teachers

n the time October 26 through 31, 2020, an introductory course of mathematics will be offered to first-semester students of physics including future teachers (No. 14000 in the list of courses). The course discusses the mathematical tools for the starting lectures in experimental physics including the hands-on training classes. Its objective is to provide students with the mathematical background for easy progress in the first semesters. Due to the present Covid-19 situation, the number of participants is limited to 73. If not all places are occupied, also students of other science disciplines are welcome to attend. The course will be given in German language. The following topics are addressed:

- Angles, coordinate systems
- power series expansion of functions

• vector analysis

differential calculus

elementary functions

integral calculus

complex numbers

• simple examples of ordinary differential equations

The course comprises **lectures in the morning**, 8.30 am to 12 am, and **problem classes** in the afternoon, 1 to 4 pm.

UPDATE - Due to the corona situation the following important changes have occurred:

The course will take place at the following places:

- Lecture Hall H18 (Building NW II): Bachelor students on Physics, last name beginning with A-R
- Seminar Room S135 (Building NW III): Bachelor students on Physics, last name beginning with S-Z
- Lecture Hall H25 (Building RW I): all Students on Teacher education for Physics

Meeting point: October 26, at 8.30 am, directly in front of the corresponding lecture hall or seminar room. Please note all further information, especially on hygiene, at

https://www.physik.uni-bayreuth.de/freshmen

The lecture notes can be downloaded free of charge from

http://www.agkador.phy.uni-bayreuth.de/de/download/index.html

(available in English or German language). Printed copies (monochrome, only in Ger-man) can be purchased on the first days of the course at ca. \in 4.00.

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Institute of Physics



