Information Experimental Physics Va (Physics of Atoms and Molecules), Winter term 23/24

Preface

The organization of the course “Experimental Physics Va” (registration, notifications, allocation of exercise groups, distribution of tasks, chat for questions, etc) is handled completely via the online platform MS Teams - details can be found below.

Lecture Experimental Physics Va

The lecture is given in a hybrid format: in addition to the in-presence lecture, we enable online participation via the MS Teams conference system (live stream from the lecture hall). Furthermore, recordings of the lectures are made available (unedited) after the respective lecture date so that they can be accessed and viewed at any time. Questions about the lecture can be asked either during the event or in the online chat on the MS Teams platform; we will provide answers in a timely manner; however, students are of course also welcome to contribute to the discussion.

Content: atomic- und molecular physics (hydrogen atom, one-electron-systems, atoms in magnetic and electric fields, interaction of atoms with light, atoms with many electrons, molecules: structure – binding - spectra).

Exercises for Experimental Physics Va

Exercises are set for each week of the lecture and are made available online in the form of a PDF document on Mondays of each week. The exercises refer to the material of the lecture Experimental Physics Va.

The time for working out the exercises is one week, the solutions are presented in the weekly meetings of the exercise groups. To this end, the exercise group leaders will select students who will present their solutions during the meeting. By ticking off certain exercises , you declare that you are able to present the solution in the meeting.

This semester there will probably be two different exercise groups, which will be held on different dates. You will be assigned to one of these groups according to the priorities you indicated in the registration for the MS Team "EP Va: Atom-/Molekülphysik - Physics of Atoms/Molecules". Exercise group instructors are available to answer questions via chat through MS Teams during normal working hours. Questions received late in the evening or on weekends will not be answered until the next business day.

Regular participation in the exercises is a prerequisite for admission to the module examination!

To obtain admission to the examination, you must…

- achieve at least 2/3 of the total score for the exercise tasks.
- actively participate in the exercises (presenting an exercise task at least three times).
- be absent from the exercise no more than once without excuse. If you are unable to attend a tutorial, please notify your tutorial group leader in advance by mail/MS Teams. If there are valid reasons, such as illness, the absence will be excused

For participants from higher semesters: A previously acquired admission is proven by an already taken examination or by a certificate of the corresponding chair.

Publication of the first exercise sheet: 23.10.2023.

Start of exercises: 30.10.2023.

Technical Implementation

As a platform for providing material for the lecture we have chosen Microsoft Teams, for which UdS has a campus-wide license. In addition to sharing lecture and exercise materials, we will also use Teams to share relevant organizational information about the lecture and to clarify any questions you may have. Basic descriptions of Teams and links to download the software for both desktop and mobile versions can be found at (mostly in German):

https://www.uni-saarland.de/projekt/digitalisierung/uebergreifende-digitalisierungsthemen/digitalelehre/microsoft-teams-fuer-studierende.html

In the following, we provide brief descriptions of how to use MS Teams for the lecture. After a few introductory notes on how to register for the lecture, we will guide you step-by-step through the structuring of the "Experimental Physics" team. The descriptions refer to the desktop version of Teams.

Registration for the lecture

You have to register for the lecture and the exercises:

Via MS Teams platform:

You find the link on the LSF page and on our webpage

https://www.uni-saarland.de/lehrstuhl/becher.html

see “Lehre > Aktuelle Veranstaltungen > Experimental Physics Va“. Upon registration we ask for some basic information such as your name, your study course and semester, student indentification number and your user identification (UdS Kennung).

As soon as you have registered, you will receive an email from us with an invitation to join the "Experimentalphysik Va" team in MS Teams (note: since we send the invitations "by hand", it may take a little while until you receive them).

If you follow the link "Open Microsoft Teams" in the mail, Teams will open (you may need to install Teams and confirm that it should open). To log in to Teams, use your UdS user ID including the domain (e.g. s9mamust@uni-saarland.de, ATTENTION: NOT @stud.uni-saarland.de) and the corresponding password.

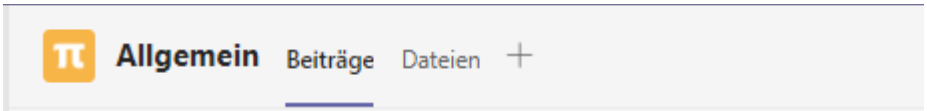
On MS Teams you will see an overview of the teams you belong to. If you click on [145414] Experimentalphysik Va: Atom-/Molekülphysik - Physics of Atoms/Molecules“ you will get to the team

of the lecture. The lecture is divided into different channels, which you can see on the left side of the screen (see figure).

We recommend to activate the channel notifications (right-click on the channel → channel notifications → All)

Channel „General/Allgemein“:

When you switch to the "General" channel, you will see a number of headings at the top of the screen.



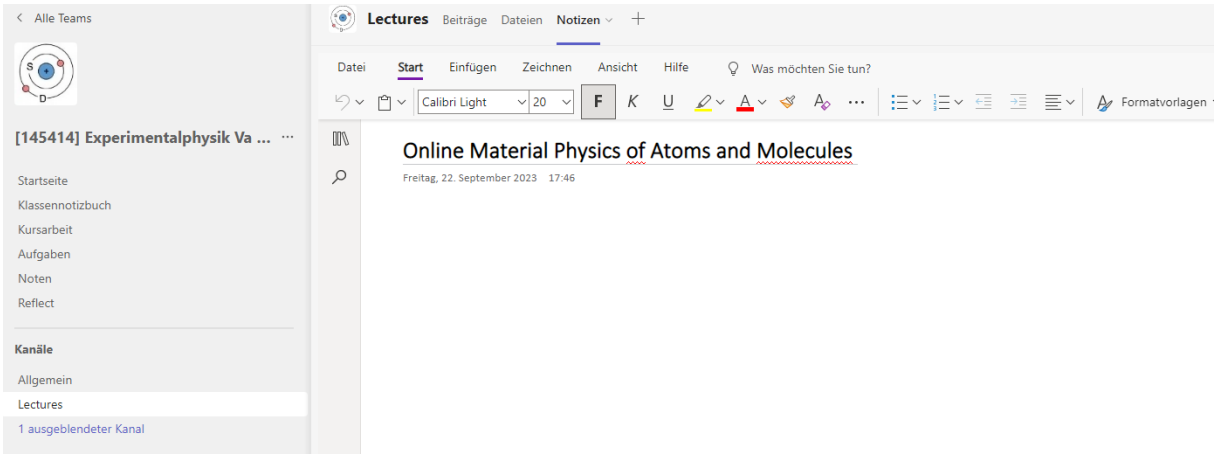
In the section "Contributions/Beiträge" we will share with you everything organizational. Files shared in this channel can be found again in the "Files" section.

Channel „Assignments“:

In the "Assigments" channel you will find all available exercise sheets, uploaded weekly (Mondays, 12:00)." In addition, general questions about the exercise sheets may be discussed in the same channel, just by opening a new conversation.

Channel „Lecture/Vorlesung“:

In the **Chat** (Beiträge) tab you might ask questions on the topics of the lecture. We to answer your questions in a timely manner.



The tab **Data**/Dateien contains all files uploaded by us.

In the **Notes/Notizen** tab you will find the course materials are provided, i.e. the lecture notes, slides, further material and links to the lecture recordings. This page clearly links all course materials so that you can always follow the current status of the lecture here.

Contact

Lecturer:

Prof. Dr. Christoph Becher, Fachrichtung Physik, Geb. E2.6, Raum 2.02; Tel. 2466; E-mail: christoph.becher@physik.uni-saarland.de

Tutors:

David Lindler: david.lindler@physik.uni-saarland.de

Dennis Herrmann: dennis.herrmann@uni-saarland.de