

# **Remote Teaching Guidelines for Part III Lectures, Examples and Revision Classes Easter Term 2020**

Last updated: 14th May 2020

The Faculty is acutely conscious of the additional commitment that the switch to remote teaching requires of colleagues at an already stressful time, and is grateful to all colleagues for stepping up to the challenge.

This document replaces the Faculty's Examples Class Guidelines for the Easter Term, and contains both procedural and more practical advice. We hope you find it useful. If you are already comfortable with your remote teaching set-up, please would you nevertheless read Sections 1 and 2.

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## 1. Guiding principles

### Best effort:

The Faculty Board has agreed that all teaching in this new setting will be provided on a best-effort basis. Students will appreciate the additional thought and preparation that adapting to these circumstances at short notice entails, as well as the possibility of things not quite going to plan.

Having said this, our best effort should include attempts to

- communicate clearly with students about what to expect from your class in order to avoid disappointment;
- provide students with an interactive experience, in particular the opportunity to ask questions;
- accommodate students in different time zones as much as is feasible and those with different access requirements.

Possible ways by which these goals may be achieved include

- a. recording your live session and offering to answer questions by email or live (video) chat (preferred) at other times;
- b. providing alternative live session times;
- c. pre-recording your class and offering to answer questions by email or live (video) chat (preferred) at different times;
- d. making written materials available online and offering to answer questions by email or live (video) chat (preferred) at different times;

Whichever option you choose, **please communicate detailed timings to the Undergraduate Office (UGO)** so that the examples and revision class timetables can be updated accordingly.

Purpose of examples classes:

- The purpose of an examples class remains that set out in the Faculty Examples Class Guidelines at <https://www.maths.cam.ac.uk/internal/teaching/files/examples-class-guidelines.pdf>.
- In the current circumstances the clear communication of mathematical content necessary for mastery of core material will need to be prioritised. It is further essential for students to have an opportunity to ask questions related to such material.

Examples class marking:

- In light of the already onerous circumstances, the requirement to mark at least two questions has been suspended for the Easter term.
- Students will nevertheless be encouraged to submit work as specified by you to enable you to give feedback to the class as a whole, and focus your teaching appropriately. This will also encourage students to stay engaged with the material.
- We will encourage students to submit their work in pdf format to Moodle, in a folder created specifically for your course/examples class group.
- If you wish and are able to, you are free to mark the work and return it to students (they will thank you).

Purpose of revision classes:

- The revision class will primarily serve the purpose of preparing students for the pass/fail examination in May/June. [We may need to provide additional revision support closer to the classed examination.]
- Students should come away with a clear idea of what will be expected of them on this exam, and have the opportunity to ask questions about the course material.
- The revision class is not envisaged to be given by anyone other than the lecturer.

Important points for the revision class:

- Students have been told that  
 “Questions on the pass/fail exam will be designed to be appreciably more straightforward than standard Part III questions. In particular, they will not contain elements designed to distinguish between candidates performing at the higher end of the standard classing examination. We anticipate that the majority of candidates will find themselves under

substantially reduced time pressure compared to a standard Part III examination.”

**Please do not communicate the desired mark distribution and completion time** for each question, as indicated to you by the Chair of Part III examiners, to students. It is possible that non-trivial scaling will be required to ensure a fair balance between different exams, and it is therefore very important that students’ expectations are managed in a consistent and centralised way.

- You are encouraged to provide a sample exam question of the type that may appear on the pass/fail examination, and discuss it during the revision class.
- Please bear in mind that some students in your class may be unable to sit the pass/fail exam as a result of sickness, caring responsibilities etc. in the first assessment period in May/June, and will need to prepare for a pass/fail exam of an identical format during the second assessment period (the timing of which has not yet been confirmed by the University). Keeping a record(ing) of the class may be helpful for such students in preparing for the pass/fail exam later on.

## 2. Before, during and after the class

The majority of this section is written with real-time content sharing in mind (see Section 3), though some aspects may still be useful to those pursuing a different route.

### Preparing for the class:

- **Please email the students in your class at least 48h in advance of the class by email of which platform you are planning to use, and how to access it.** If you require an up-to-date list of students in your class the UGO (at [examplesclasses@maths.cam.ac.uk](mailto:examplesclasses@maths.cam.ac.uk)) can provide this. In almost all cases, this list will be identical to the one that was emailed to you in Week 2 of the term you were teaching.  
There may be some students who will not be taking your course for the pass/fail exam but may be considering it for the later, classed exam, and who might therefore wish to attend your revision class. It is thus recommended that you advertise your class more widely than just to the students enrolled for your exam.  
Students have been asked to contact the lecturer/examples class instructor if they have not received any information 48h before the class, to ensure no-one misses out.
- If you find yourself unable to give the class at the scheduled time, please let the UGO know as soon as possible. If you need to postpone at the last minute, please attempt to notify your students directly in addition to informing the UGO.
- You will wish to ensure that any filming from your webcam for your session is done against a suitable background and in suitable attire, and avoid unnecessary distractions during your class.
- Since real-time interaction with your students may be more limited than usual, you may wish to ask them to complete a self-assessment form before the class. This is by default available for your course on the Part III Moodle, and all students will have been sent instructions for how to access it. Instructions for how to view the responses are included in Appendix A.

- For examples (rather than revision) classes, please inform your students at least 48 hours in advance of which questions from the final examples sheet you would like them to submit via the Part III Moodle. All students will have been sent instructions for how to upload their work. Instructions for how to view the submissions are included in Appendix A.
- You may also wish to ask your students to submit any important questions they would like to see answered in the class by email ahead of time as interaction during the class may be more cumbersome than usual. This may be particularly important for the revision class leading up to the pass/fail exam this summer, which will need to largely focus on core content.

#### During the class:

- **You are strongly encouraged to consider making a recording of your session.** There are easily identifiable buttons for this purpose on Zoom, MS Teams and Google Meet.
- If you are recording, please announce this to students at the start of the class, and ask those not wanting to appear in the recording to switch off their video. In addition, it is recommended that you copy and paste the following wording into the chat:
 

“By attending this live session you confirm that you agree to its being recorded. If you do not wish to appear in the recording please switch off your video camera and mute your microphone.  
Recordings may be made available to current Part III students under Raven authentication. Students are reminded that recordings are to be used for study purposes only and should not be posted online or shared in any other way. Students are only entitled to record a session themselves if they normally have permission to record as part of their DRC-authorized 'reasonable adjustments'.”
- You may wish to mute your students for most of the class to ensure clear communication. If you choose to do this, it is important to explain to students at the start of the class how they can ask questions. Zoom has a ‘raise your hand’ button, almost all platforms have a concurrent chat, or you could simply provide an opportunity for questions at various points during the class.
- Please avoid commenting on students’ background or appearance, even if well-intentioned.
- To avoid unintentionally transmitting non-relevant information to students, it is recommended that you share the relevant application window only (possible on Zoom and MS Teams), or close non-relevant applications and turn off notifications (Skype and Google Meet).
- Examples class instructors requiring an attendance record in order to claim payment from the colleges or the departments should ask their students at the start of the class to sign in the chat with their name and CRSid, and then save the chat before the end of the class (in Zoom this is done by clicking on the button consisting of three dots inside a square, which is available from inside the chat).

#### After the class:

- **If you have made a recording of your session, please upload this to Moodle (see Appendix A) within 24 hours if possible. The recording will only be available to current Part III students who log in with their Raven ID.** Students will have agreed to use these recordings for study purposes only, and to not share them online or in any other way. You may request that the Part III Secretary remove your video from the Moodle at any time. By default, we expect all videos to be taken down after the classed examination.
- If you wrote on a tablet or a piece of paper during the class, please consider converting your output to pdf and making it available to students, either by emailing it to students directly, or by adding it to the Part III Academic Support Moodle (preferred, see Appendix A).

### 3. Choice of technology

#### Choice of platform:

- There are several platforms available that support real-time content sharing, including Zoom, Google Meet, MS Teams, and Skype. While it appears that Zoom is the most stable and user-friendly of the platforms listed, and most suitable for the context of Part III, the choice of platform is ultimately yours and will depend on your individual preferences and equipment. Both MS Teams and Google Meet are supported by the University. The best way to establish your preferences is to try out the different platforms.
- Free Zoom licences only cover sessions lasting up to 40 minutes. **If you have trialled Zoom and would like to use it for the purpose of teaching in Part III, please buy a monthly Pro licence (<https://zoom.us/pricing>) for now. The departments have agreed to reimburse the cost of this licence for a month or two, as necessary to cover your Part III teaching. You are kindly requested to cancel your licence if you do not wish to pay for it beyond this period. If you anticipate more than 100 participants in your lecture/class, please email [partiii-secretary@maths.cam.ac.uk](mailto:partiii-secretary@maths.cam.ac.uk) as soon as possible.** This stopgap solution is in place as there is a possibility that the University may acquire a Zoom site licence in the future.
- When using Zoom, it is recommended that you do **not** give out your personal meeting ID to students but instead create a new meeting for each class, ideally with a password. This is done by clicking on the button consisting of a plus symbol inside a small square in the Zoom app. Clicking on 'Copy invitation' will copy all the information students need to access your class to your clipboard, from where it can easily be pasted into an email. More detailed information on recommended settings are included in Appendix B.
- In order to use Google Meet, it is recommended that you log in to Google at <https://meet.google.com/> using your [CRSid@cam.ac.uk](mailto:CRSid@cam.ac.uk) email address and your Raven password. Instructions for how to start and run meetings can be found at <https://support.google.com/meet/?hl=en#topic=7306097>.
- The quickest way to install MS Teams is to visit <https://teams.microsoft.com>. You will automatically be prompted to download the right app for your device (and may be given the option to continue using the web app depending on your browser). You log

in to Teams using your [CRSid@cam.ac.uk](mailto:CRSid@cam.ac.uk) email address and your University Active Directory password (which may be the same as your Raven password). Instructions for how to use Teams are available at <https://universityofcambridgecloud.sharepoint.com/sites/MicrosoftTeamsHub/SitePages/Meetings-in-Teams.aspx>.

- If you wish to pre-record your class, the University's supported system is Panopto. Instructions and help are available at <https://www.vle.cam.ac.uk/course/view.php?id=180842> (log in with your Raven ID and password). This may be the preferred option for very large lecture courses, for which Zoom meetings or other conference calls may be unwieldy.

#### Possible set-ups for sharing content with students in real-time:

- Option 1. If you have a tablet, you can write on it and share its screen with the platform and your students in real time.
- Option 2. If you have a smartphone, you can film your hand as you write on a piece of paper and share the output in real time via one of the above platforms ('virtual visualiser'). You can also use a webcam for this purpose, which may be connected to your computer with a cable.
- Option 3. If you are willing to prepare slides in advance (handwritten and scanned, or latexed), you can share these in real time via one of the above platforms and talk students through them ('virtual presenting').
- Option 4. If you have a camera connected to a laptop/PC and a blackboard/whiteboard/flip chart at your disposal, you could film yourself writing on it and share the output in real time via one of the above platforms ('virtual lecturing').
- Option 5. You could share pre-prepared slides (either handwritten and scanned, or latexed) with your students via email or Moodle in advance of the class (please email [partiii-secretary@maths.cam.ac.uk](mailto:partiii-secretary@maths.cam.ac.uk) to arrange this) and simply talk through them during the class.
- Option 6. You could write (in LyX, say) or compile (in your preferred LaTeX editor) content in real time while sharing your screen and delivering verbal commentary.

Option 6 is clearly demanding and relatively labour-intensive. Option 5 will feel less interactive than the others, but might be the easiest option if you are most comfortable on Skype. With Option 4 the main concern is insufficient quality of the transmitted image due to lack of resolution of the camera, and poor lighting.

**Options 1-3 are recommended**, if available to you. Further details on each option are provided below.

#### Option 1:

- The easiest way to use your tablet in this set-up (which works across all operating systems) is to simply join your conference call from your tablet, in addition to hosting it on your computer. From your tablet, you then need to share your device (by clicking on 'Share Screen' in Zoom, or 'Present' in Google Meet, for example) for your tablet's screen to appear to other participants in the call. You may have to install an app on your tablet corresponding to the platform you have chosen.

- Zoom's 'spotlighting' feature helps to ensure that your tablet's screen remains the main focus of the call at all times (otherwise the meeting's focus may switch to the person speaking).
- If you have an iPad and plan to use Zoom, you can share your iPad's screen directly via AirPlay (click 'Share Screen', iPhone/iPad via AirPlay).
- It is recommended that you mute any audio on your tablet during the call.
- You will want to ensure your tablet is fully charged or connected to power.

#### Option 2:

- The easiest way to use your smartphone in this set-up (which works across all operating systems) is to simply join your conference call from your phone, in addition to hosting it on your computer. From your phone, you will then need to share your device (by clicking on 'Share Screen' in Zoom or 'Present' in Google Meet, for example) for your phone's video to appear on the screen of the other participants in the call. You may have to install an app on your phone corresponding to the platform you have chosen.
- Zoom's 'spotlighting' feature helps to ensure that your phone's video remains the main focus of the call at all times (otherwise the meeting's focus may switch to the person speaking).
- If you have an iPhone and plan to use Zoom, you can share your phone's video directly via AirPlay (click 'Share Screen', iPhone/iPad via AirPlay).
- It is recommended that you mute any audio on your phone during the call.
- If you intend to use your phone in this way for a longer period of time, it pays to fix it at a suitable height above your desk. For example, placing your phone onto a piece of cardboard protruding beyond the edge of a (vertically placed) lever-arch file, with a book as a counterweight, seems to achieve a satisfactory outcome. Other creative solutions may be found by googling 'using your phone as a document camera'.
- You might also want to connect your phone to power.
- If you plan to use a webcam with Zoom, you need to click on the upward-pointing arrow to the right of 'Stop video'/'Start video' at the bottom of the main Zoom window to switch to the video feed from your webcam.

#### Option 3:

- You will need to prepare a pdf in advance, either by writing on paper and scanning your notes (see below), or using your preferred LaTeX editor.
- Landscape format lends itself better to sharing on screens, so you may wish to consider producing slides in Beamer (<https://ctan.org/pkg/beamer?lang=en>). Beamer also has the advantage of allowing 'overlays', meaning you can reveal content one line at a time.
- When your pdf file is ready, simply open it in your preferred pdf viewer. Once in your conference call, share your screen (by clicking on 'Share Screen' in Zoom or 'Present' in Google Meet, for example), and ensure that your pdf viewer is the main (ideally the only!) window in sight. Now scroll/click through your slides as you speak.
- Note that unlike Skype, many of the other platforms allow you to share specific application windows only, which can help avoid accidental 'over-sharing' of personal information (such as your inbox) during the call.

#### A note on recording:

- If you hold and record your class on Zoom, the resulting file size should be small enough for direct upload to Moodle (provided your class does not exceed two hours in length). Instructions for how to upload your videos to Moodle are included in Appendix A.
- A comparable recording made in MS Teams is likely to result in a slightly larger (though possibly still manageable) file.
- If you produce video content in any other way, you may have to manually compress your video to ensure that the Moodle file upload limit of 2GB is not exceeded. File sizes of a few hundred MB would seem to be the desirable norm, given that students will need to be able to download these videos at the other end. Instructions for manual compression of files may be obtained by emailing [help@maths.cam.ac.uk](mailto:help@maths.cam.ac.uk) (please give details of your operating system).
- In Zoom, you can specify the folder that videos are saved to by going to Preferences->Recording. Recordings made in MS Teams are saved to the Microsoft Stream by default (the processing is not instantaneous), and can be downloaded from there.

#### A note on scanning:

- Handwritten notes are most conveniently scanned using your smartphone. Several apps for this purpose are available free of charge. These include CamScanner and Adobe Scan, which are the two apps we will [most likely] recommend to students. They are suitable for both iOS and Android devices. CamScanner allows free access to its Premium version provided you create an account with your [CRSid@cam.ac.uk](mailto:CRSid@cam.ac.uk) email address (but please do not re-use any of your University passwords).
- If you own an iPhone, you may instead wish to follow the instructions provided at <https://support.apple.com/en-us/HT210336>.
- If you own an Android phone, you may instead wish to use the Google Drive App as explained at <https://support.google.com/drive/answer/3145835?co=GENIE.Platform%3DAndroid&hl=en>.
- You may of course have access to a scanner connected to your computer. Alternatively, you may convert image files obtained using your phone or camera to pdfs on your computer. Many image processing applications have an 'export as...' button, for which 'pdf' subsequently appears as an option.

## 4. Further guidance and support

#### Trial sessions:

The Online Teaching Committee is grateful to Ben Allanach, David Skinner, Henry Wilton and Matt Wingate for hosting online trial sessions before the start of term. If you feel there is further demand for these, please email [director-tpe@maths.cam.ac.uk](mailto:director-tpe@maths.cam.ac.uk).

#### IT issues:

Issues with devices (smartphones, tablets, laptops) may be brought to the IT team's attention at [help@maths.cam.ac.uk](mailto:help@maths.cam.ac.uk), who will do their best to assist. Please be as specific as you can by identifying the make and model of the device, the version of your operating system and any error messages you may have received.

#### University Guidance on Remote Supervisions:

The Cambridge Centre for Teaching and Learning has put together some guidance for online supervisions at [https://www.cctl.cam.ac.uk/files/cctl\\_moving\\_supervisions\\_online.pdf](https://www.cctl.cam.ac.uk/files/cctl_moving_supervisions_online.pdf) parts of which may be helpful for those planning online examples and revisions classes (see in particular the linked documents on the penultimate page).

#### Acknowledgements:

The Online Teaching Committee is indebted to Alex Hancock in the Graduate Office for setting up the Moodle infrastructure at very short notice, and providing the instructions in Appendix A.

#### Feedback:

This document was put together in a very short space of time, and can no doubt be improved significantly. It will be updated regularly over the coming weeks in light of colleagues' comments and experience. Please send any feedback to [director-tpe@maths.cam.ac.uk](mailto:director-tpe@maths.cam.ac.uk).

## Appendix A: Moodle instructions

If you experience any problems with these instructions, please contact Alex Hancock at [partiii-secretary@maths.cam.ac.uk](mailto:partiii-secretary@maths.cam.ac.uk).

- Go to the Part III Academic Support Moodle page at <https://www.vle.cam.ac.uk/course/view.php?id=144111>
- Log in using your Raven details.

#### Viewing uploaded work:

- Scroll down to find the 'Examples Class Submissions' section and expand it using the arrow just to the left of the title.
- Scroll down to find your subject – they are arranged alphabetically. Some subjects have multiple groups or multiple classes; these are listed separately.
- To find the submissions for a subject/group/week, click on the assignment link. This will take you through to a summary page.
- Click on the 'View all submissions' button to take you through to a table of all students, and any submissions they may have made. You can sort the table by clicking on any of the links in the top row.
- Scroll to the bottom to find Options. This allows you to change the number of assignments displayed, or to filter the table.
- To view a submission, click on the pdf link. This will download the submission.

- To download multiple submissions, check the box next to the user's pictures, then scroll down to the dropdown menu labelled 'With selected' and choose 'Download selected submissions'.

#### Returning marked work to students:

On having reached the table of all students by clicking on the 'View all submissions' button as described above, submissions can be viewed, graded and annotated within Moodle:

- Click 'Grade' in the relevant submission's row. This takes you through to the marking interface.
- Click 'Restore default layout' in the bottom right corner to view the pdf and all the marking options alongside each other. This is the middle button of the group of three in the corner.
- Pdfs can be annotated using the options along the top. Comments can be made in the textbox to the right of the pdf.
- At the bottom of the page, there is an option to notify the students of the changes you have made. Untick the box if you do not want to notify the students.
- Click 'Save changes' at the bottom, then 'View all submissions' in the top left to return to the table. Click 'Save and show next' if you would like to proceed to the next submission.

If you would rather grade the submissions offline, you can download them, do what you need to do, and then re-upload them:

- Click 'Grade' in the relevant submission's row. This takes your through to the marking interface.
- Scroll down and you will find a textbox for comments.
- Scroll further down to the section marked 'Feedback files'. You can upload anything you would like to feedback to the students here. Either drag and drop the file into the box, or click the icon 'Add' icon just above it. If the latter: click 'Upload a file' on the left of the window that appears, then 'Choose file'. Find the file, click on it and press 'Open', then click 'Upload this file'.
- At the bottom of the page, there is an option to notify the students of the changes you have made. Untick the box if you do not want to notify the students.
- Click 'Save changes' at the bottom, then 'View all submissions' in the top left to return to the table. Click 'Save and show next' if you would like to proceed to the next submission.

#### Viewing responses to the self-assessment form:

Students will be submitting their completed self-assessment forms in the same way that they submit examples class work, so please follow the instructions for viewing uploaded work above to view the self-assessment forms.

#### Uploading video recordings:

- Scroll down to find the section entitled 'Upload of Video and Other Resources' and expand it using the arrow just to the left of the title.
- Click on the assignment link that appears, labelled 'Upload of Video and Other Resources'.
- On the summary page that follows, click on 'Add submission'.

- Upload your file by either dragging and dropping the file into the box, or clicking 'Add' just above it.
- Save the changes.
- To add additional files, click on 'Edit submission' on the summary page and add more files into the box. Save the changes.

Please ensure your video files are clearly labelled with the name of your course, and the name of the session (if appropriate). Note that there is a file limit of 2GB.

The Part III Secretary will ensure that your videos appear in the appropriate place on the Part III Moodle. There is no need to email the Part III Secretary directly as the drop box is checked at least daily.

#### Uploading additional written material:

You may use the same procedure as for video recordings. Please ensure your files are clearly labelled with the name of your course, and the name of the session (if appropriate).

The Part III Secretary will ensure that your materials appear in the appropriate place on the Part III Moodle.

## Appendix B: Recommended Zoom settings

Basic guidance on how to set up and join a meeting are available at <https://support.zoom.us/hc/en-us/articles/206618765-Zoom-Video-Tutorials>

#### Scheduling your meeting:

- To schedule a meeting, press the plus button from within the Zoom app. A dialogue with various options will appear.
- If you are planning to run more than one class addressed at the same cohort (e.g. because you are giving a lecture course), then you should tick the box 'recurring meeting'. This ensures that students can access your class using the same meeting ID each time. You will not need to specify a date and time (though you can if you really want to, through the calendar integration provided). **If you are lecturing, we will advertise the Zoom ID to students, you do not need to contact them.**
- If you are planning to run a set of classes for different groups of students and do not expect students to move between them, it is recommended that you set up a separate meeting for each. You will need to specify the date and time.
- For security reasons it is strongly recommended that you do **not** give out your personal meeting ID to students, and instead allow Zoom to automatically generate a meeting ID for your class.
- By default, your meeting should have a password. This will be included automatically in the Zoom link you will send to your students to access the meeting.
- The default video options can be adjusted during the meeting.
- You may ignore the choice of calendars that appears if you do not use/have access to any of these.
- Finally, under 'Advanced Settings', it is recommended that you

- do **not** enable the 'waiting room' feature as it would require you to admit students to your class one by one (though this may be useful for supervisions);
- do **not** enable 'join before host';
- **do** mute participants on entry;
- do **not** enable 'only authorised participants can join', as this would require students to create a Zoom account.

You may wish to set your meeting to record automatically, especially if you set up a recurring meeting (because you are lecturing, say).

- Once your meeting is scheduled, click on 'copy invitation' to copy the information participants need to join the meeting to the clipboard. **It is important that you do this WHILE THE MEETING WHOSE DETAILS YOU ARE HOPING TO SHARE IS HIGHLIGHTED**, otherwise you may share the information for the wrong meeting.

#### During the meeting:

There are various in-call Zoom settings with which you may wish to familiarise yourself.

- When you are sharing content from a tablet or phone which is logged into the meeting as a separate participant, you will want to 'Spotlight' the video feed of your device in order to ensure it shows up in the centre of the Zoom window for all participants (otherwise the main focus of the meeting will automatically switch to the video of the person speaking, which is rarely desirable in a teaching setting). You can only spotlight a video as a host. This is done by right-clicking on the video you wish to spotlight (or, on a Mac, by clicking on the ellipsis in the top right-hand corner of the video you wish to spotlight), and selecting 'Spotlight video' from the ensuing drop-down menu.
- 'Spotlight video' is different from 'Pin video' in that the latter only affects your own screen layout and not that of others in the call. Every participant in the call can 'pin' a video to their own screen.
- In order to share content from your laptop, click on 'Share Screen' at the bottom of the main Zoom window. You may select to share your entire screen ('Desktop 1'), or the specific window of the application whose content you would like to share (for example, your pdf viewer). The latter is strongly recommended for privacy reasons.
- To the right of the 'Share Screen' button you will find a small upward-pointing arrow. Clicking on this arrow allows you to access 'Advanced Sharing Options'. For most classes, it is recommended that you set up your meeting so that only you (the host) can share.
- You can mute and unmute participants by clicking on 'Participants' at the bottom of the main Zoom window. A list of participants in your meeting will appear on the right. You can mute or unmute all participants by clicking on the relevant button, or individual participants only by hovering over their name and clicking on the 'Mute'/'Unmute' button that appears.
- In order to record the meeting, simply press the record button at the bottom of the main Zoom window. Please refer to the information about our recording policy in Section 2 of this document.
- Clicking on 'Security' at the bottom of the main Zoom window gives you the option to 'lock the meeting' (no new participants can enter the meeting). While this can be very

useful in other contexts, it is not recommended that you use this feature for teaching as students may be arriving late to the class.

After the meeting:

- To end the meeting, press 'End meeting' in the bottom right of the main Zoom window. It is recommended that you 'end the meeting for all' when prompted.
- Your video recording will be available in the folder you specified under 'Preferences->Recording' in the main Zoom menu.

## Appendix C: Guidance for students

### **Guidance for Students on Part III Remote Lectures, Examples and Revision Classes Easter 2020**

Last updated: 20th April 2020

It is hoped that most Part III lectures, examples and revision classes during the Easter term will go ahead as planned, but remotely. There will necessarily be a period of adjustment while lecturers, instructors and students make their best effort to get to grips with the new format and technology. There will also inevitably be access issues of various kinds (including but not limited to different time zones, quality of internet access, lack of quiet study space, illness and caring responsibilities). The Faculty aims to make reasonable and fair adjustments to its usual processes where possible to account for such difficulties.

This document gives further details on how lectures and examples classes will be delivered and practical guidance on how to participate in the remote teaching on offer this term. You are requested to read it carefully. The latest version of this document will be available on the **Part III Academic Support Moodle** at

<https://www.vle.cam.ac.uk/course/view.php?id=144111>.

## Lectures

All Part III and graduate lectures will be delivered on Zoom this term. **For security and privacy reasons, the Zoom access information below must not be shared with anyone outside the University.**

### **Part III courses**

Gauge/Gravity Duality (Dr A. Wall)

M. Tu. Th. F. 10am

<https://zoom.us/j/7652154794?pwd=U0pqK0Vlb3pLRVdWQ0NMeUNIZStVZz09>

Meeting ID: 765 215 4794

Password: holography

Classical and Quantum Solitons (Prof. N. S. Manton)

M. Tu. Th. F. 11:15am

<https://zoom.us/j/99286948592?pwd=QnlmLzRLTIFYRDINenZKWWZxTFU4Zz09>

Meeting ID: 992 8694 8592

Password: 027595

The above courses will not be examinable for the Pass/Fail examination in May/June. However, candidates may choose to offer them for the later, classed examination.

### **Graduate Courses**

*Perfectoid Spaces* (Dr T. Csige)

M. W. F. 10am

<https://zoom.us/j/98357820125?pwd=ja4ST9WezWOHzr882fKCaRCaO0WDhg>

Meeting ID: 983 5782 0125

Password: 199886

*Applications of Pseudofinite Model Theory* (Dr G. Conant)

M. W. F. 4pm

<https://zoom.us/j/92988175217?pwd=MitvMTZmVURzVxPYIVzcUpJelJLQT09>

Meeting ID: 929 8817 5217

Password: 044408

### **Examples and Revision Classes**

An updated examples class timetable is available on the Part III Academic Support Moodle at <https://www.vle.cam.ac.uk/course/view.php?id=144111>. You are encouraged to check back frequently for updates if some of your classes are still outstanding.

The revision class timetable will be published shortly, with the majority of classes associated with Michaelmas-term courses expected to take place in Week 3 and Lent-term courses in Week 4. Some lecturers may choose to offer alternative arrangements for their course, such as an office hour. Some cancellations may occur as a result of staff sickness or other unforeseen circumstances.

Lecturers/examples class instructors will choose the platform and means of delivery that is best suited to their educational goals and teaching style, amongst those available to them.

What follows is a rough outline of what to expect from each class:

#### Before the class:

- Lecturers/examples class instructors will contact students in their class directly with information on how to join the class at least 48h before it is due to take place. This may be in the form of a Zoom meeting ID, a Google Meet link or an invite to an MS Teams meeting. If you have not heard from them by this time, please email the lecturer/instructor to let them know that you would like to attend.
- Lecturers/examples class instructors will also let students know what work to submit, if any, and by what deadline. Guidance on scanning and uploading your work to Moodle is included below.

- Many lecturers/examples class instructors may be unable to mark your work electronically in the present circumstances. However, you are still encouraged to submit work as requested as it will allow lecturers/instructors to determine the appropriate focus for the class and to provide general feedback.
- Some lecturers/examples class instructors may ask you to submit a self-assessment form. This should also be submitted via Moodle as described below.

#### During the class:

- The lecturer/examples class instructor will explain to you how to ask questions during the class.
- They should also tell you whether they are recording the class. **Your continued attendance at a recorded session implies you have given consent to its being recorded. You are asked to switch off your video camera and mute your microphone if you do not wish to appear in the recording.**
- Students are entitled to record a session themselves only if they normally have permission to record as part of their DRC-authorized 'reasonable adjustments'.

#### After the class:

- Lecturers/examples class instructors are encouraged to make recordings of their remote sessions and/or any supplementary materials available in a dedicated section on the Part III Academic Support Moodle in order to accommodate those students who may find themselves unable to attend the live class for time zone or other good reasons.
- **Students are respectfully reminded that recordings and other materials are to be used for study purposes only and must not be posted online or shared in any other way.**
- It may take several days for these materials to appear on the Moodle after the class, and we ask for your patience while we optimise this new process.

### Advice on Scanning

- Handwritten work is most conveniently scanned using your smartphone. Several apps for this purpose are available free of charge. These include CamScanner and Adobe Scan, which are suitable for both iOS and Android devices. CamScanner currently allows free access to its Premium version provided you create an account with your CRSid@cam.ac.uk email address (but please do not re-use any of your University passwords).
- If you own an iPhone, you may instead wish to follow the instructions provided at <https://support.apple.com/en-us/HT210336>.
- If you own an Android phone, you may instead wish to use the Google Drive App as explained at <https://support.google.com/drive/answer/3145835?co=GENIE.Platform%3DAndroid&hl=en>

## Upload to Moodle

- Examples class work should be uploaded to the corresponding 'assignment' on the Part III Academic Moodle at <https://www.vle.cam.ac.uk/course/view.php?id=144111>.
- Detailed instructions and an assignment for each class are available in the section entitled 'Examples Class Submissions', which you can expand using the arrow just to the left of the title.
- Please ensure you upload your work as a **single pdf file**. The name of your pdf file should be of the form  
'name of the lecture course as an acronym\_examples class group/week (as appropriate)\_your CRSid.pdf'.
- A fillable self-assessment form in pdf format is available in the same place, and should be uploaded to the relevant examples class assignment. Your self-assessment form should be labeled  
'SA\_name of the lecture course as an acronym\_examples class group/week (as appropriate)\_your CRSid.pdf'

## Feedback

There will be a Week-2 survey which will allow you to comment on the remote teaching arrangements in place and make suggestions for how these may be improved. In the meantime you may wish to offer constructive feedback directly to the lecturer/instructor, or write to [director-tpe@maths.cam.ac.uk](mailto:director-tpe@maths.cam.ac.uk).

Any comments on this document should be sent to [director-tpe@maths.cam.ac.uk](mailto:director-tpe@maths.cam.ac.uk).