Ph.D. Program in Physics

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Date: May 12, 2021

To: Physics Graduate Students, Faculty and Administrators
From: Prof. Giovanni Ossola, Qualifying Exam Committee Chair

Re: June 2021 Physics First Examination – Remote

The Physics First Examination (Qualifying Exam) is scheduled to be administered remotely in 2 sessions during the month of June 2021. Each session will be a test of 2 subject areas over a 4-hour period with a 2-hour break between tests. Please see below for exam dates, times, grading standards, registration instructions and other essential information.

Required Subject Tests: All students are required to take Electromagnetism, Quantum Mechanics and Statistical Mechanics. All General track students are required to take Analytical Dynamics. Students in the Photonics track are required to take the Photonics test in lieu of Analytical Dynamics.

Note to 2nd year or higher doctoral students who did not pass a previous First Exam: The exam will be given twice this summer: in June and in August. You are <u>required</u> to take the **June 2021** exam. With recently approved changes in the administration of the exam, each exam subject can now be passed individually. If you fail any subject, you will need to apply for an additional attempt immediately. If your request is approved, you will be examined on the subject(s) you failed in August.

Note to all 1st-year doctoral students: The exam will be given twice this summer: in June and in August. In recognition of the unusual circumstances you have encountered this year, you have been provided with the option to take the **June** exam or skip it and go straight to the **August** exam. Either way, the first exam that you take will <u>not</u> count towards your two attempts to pass it.

Each exam subject will be passed individually: you will only need to repeat the subjects you did not pass. If you take the June exam, you will be examined on the subjects you did not pass (if any) in August. After that, your next opportunity to take the exam will be in Spring 2022.

Examination Schedule and Subject Areas

- Analytical Dynamics or Photonics, 10:00 AM 12:00 PM US EST
- Electricity and Magnetism, 2:00 PM 4:00 PM US EST

Session #1, Tuesday, June 15

- Quantum Mechanics, 10:00 AM 12:00 PM US EST
- Statistical Mechanics, 2:00 PM 4:00 PM US EST

Session #2, Thursday, June 17

Exam Platform (both sessions) - Zoom

An invite link will be provided to registrants prior to the examination.

Registration Instructions & Exam Procedures

To register for this exam, please contact Daniel Moy at the Graduate Center's doctoral Physics Program office: e-mail - dmoy@gc.cuny.edu . <u>E-mail registration is required</u>. <u>Registration deadline: Tuesday, 1 June 2021</u>.

Upon registration, doctoral students will be assigned a Registration Number, provided with exam instructions and asked to sign a *Set of General Rules* agreement. Please note that **your Registration Number must be used on all exam papers**. **DO NOT WRITE YOUR NAME ON ANY OF YOUR ANSWER SHEETS**.

Special Note to City College of New York Master's Students

You must direct all questions and request registration and instructions through Prof. Timothy Boyer (tboyer@ccny.cuny.edu).

Past Exam Problems and Solutions

Physics homepage: https://www.gc.cuny.edu/Page-Elements/Academics-Research-Centers-Initiatives/Doctoral-Programs/Physics

Problems: https://www.gc.cuny.edu/Page-Elements/Academics-Research-Centers-Initiatives/Doctoral-Programs/Physics/Qualifying-Exam

Solutions: https://www.gc.cuny.edu/Page-Elements/Academics-Research-Centers-Initiatives/Doctoral-Programs/Physics/Qualifying-Exam-Solutions

