

THE PIZZA SEMINAR, Phy 396T, # 55860, Fall Semester 2020

The Pizza Seminar is held irregularly from week to week, at 5 to 6 PM on Tuesdays, in Pai 3.02, to introduce both graduate and advanced undergraduate physics students to themes of basic research going on here in the Physics Department of the University of Texas at Austin. Usually the seminars do not start until a couple of weeks after the beginning of each semester.

On a typical Tuesday, especially in the Fall semester, you might find about 30 people in the audience for the week's seminar, of which 5 or so are undergraduate senior physics majors, and most of the rest are first-year graduate students, while about 5 may be graduate students or postdocs in the speaker's research group. There are usually also one or two "civilians," people from the greater Austin community who want to know about the speaker's research and its applications, and also several physics faculty members directly interested in the speaker's research. The classroom scheduled for Fall 2020 is large enough that an audience of this size can be accommodated safely, with appropriate social distancing, and required masking. Typically, the number of students taking the course for credit, CR/NC, is around 5, but in addition close to a dozen or more students take the course to earn a letter grade. Because of the Pandemic, speakers may choose to deliver their lectures either in person or via Zoom. In either case, the Powerpoint slides used in the lecture will be posted on-line ASAP after the lecture. A lecture-capture system is installed in most Natural Sciences classrooms, and if possible this system will be used to make videos of all in-person classroom lectures, which can then be posted on-line and viewed by students who for any reason do not wish to attend the lecture in person. Unfortunately this system is available only by reservation, and is likely to be in overwhelmingly heavy demand in the Fall of 2020.

Students registered CR/NC in the past were required to attend the seminars in order to receive credit. Because of the pandemic, the actual means of satisfying the attendance requirement can be worked out individually between the instructor and the student. Those students who are registered for a letter grade, in addition to some form of "required" attendance, have to do seminar-specific class work. For each lecture, students registered for a letter grade must submit to Coker via e-mail, as a pdf file, within two weeks of the lecture, a 4-page or more double-spaced report on, and synopsis of, the content of the lecture. BE CAREFUL! Almost every semester, at least one student thinks he or she is registered CR/NC when he or she is actually registered for a letter grade, a situation which inevitably leads to a grade of incomplete (X).

Each semester, faculty from many different research groups will talk about current research and what is involved in doing it, as well as immediate or near-future opportunities for students. Very good talks have frequently been given in the past by postdocs, graduate students, or even undergraduates doing research in various groups. The lecturers are volunteers, and their efforts need appreciation and support.

The atmosphere is informal, although because of the pandemic no free pizza, food, or beverage of any kind can be served. Graduate students relatively new to the department are especially encouraged to attend, but junior and senior physics majors will also find the presentations of great interest. In the past, advanced undergraduates have sometimes

made up about 50% of the audience at the Pizza Seminars.

The Pizza Seminar tries to do several things simultaneously.

- (1) It can provide a chance to hang around with cohorts and faculty outside of formal classes.
- (2) It alerts you to the existence of many active fields of ongoing research, one of which you may decide to choose to pursue in your own future career.
- (3) Even if you are already involved in graduate research, it informs you as to what else is going on within this department today — and you may be surprised to find that current research done by some other group links up directly with, or has important relevance to, your own research.

For those of you who have yet to find a faculty research advisor for your thesis or dissertation, reflect that by far the most important decision facing you in graduate school is the choice of a specific research area. You're about to stop doing homework problems where the answer was obtained so long ago no one knows who to credit, and plunge into the bottomless depths of open-ended questions. Your entire future career as a physicist could be determined by a single decision... it's wise to seek information widely before making that decision.

Even if you already think you know what area you want to do your graduate research in, you may find while listening to the Pizza Seminar lectures that

- (1) there is something going on that interests you as much as, or even more than the topic you are currently leaning toward, or
- (2) you would like to know more about a particular faculty member or group, or that
- (3) someone else's research interests and experience are potentially of great relevance and benefit to your own area of research focus, so that collaboration or frequent consultation would benefit you both.

Course web page:

- <https://tinyurl.com/oarh6wt> or
- <https://web2.ph.utexas.edu/~coker2/index.files/Phy396tpizza.html>

Because of the current pandemic situation, all individual student health concerns will be accommodated in some way that is mutually acceptable to the student and the instructor. These accommodations will be created on an individual basis, and tailored to the full extent practical and possible for the specific concerns of the student.