

COURSE TITLE: Physics Seminar Fall 2023
COURSE NUMBER: PHYS698

INSTRUCTOR: Dr. Henrique Barbosa (hbarbosa@umbc.edu)
SESSIONS: Wed 11:00-12:00 (when there are seminars or colloquiums)
Location: Physics Building, Room 401

Course Description and Learning Goals:

This course consists of attending weekly Physics colloquiums given by experts in different areas of Physics. The goals are to broaden your research portfolio, get exposure to new/challenging research questions, observe how scientists are tackling these questions, and discuss science with our guest speakers.

Schedule:

For the Fall of 2023, the Physics Department will have Colloquiums (6 in total) and Topic Seminars (5-7 in total) in alternating weeks, around our areas of research: Astrophysics, Atmospheric Physics, Condensed Matter, and Quantum Optics & Information. It will always be on Wednesday, 11 am, in Room 401 at the Physics Building. The schedules can be found here:

<https://physics.umbc.edu/colloquium-schedule/>

<https://physics.umbc.edu/seminar-schedule/>

To receive the announcement well in advance, it is strongly recommended that you join the physics group here:

<https://my3.my.umbc.edu/groups/physics>

Attending scientific events and presentations:

To make the most of a conference, workshop, colloquium, seminar, journal club, or other forms of scientific discussions through presentations, you must prepare in advance. Of course, there is more preparation involved to attend a conference or workshop, where you will spend few days listening to dozens of presentations on different topics. However, even attending a colloquium or a seminar requires some preliminary work to make the most of the experience and gain valuable insights.

Remember: scientific presentations are not just about passive learning; they are opportunities for active engagement, networking, and professional development. Approach them with curiosity and an open mind, and you'll maximize the benefits.

Here's a step-by-step guide on how to prepare:

1. Know the Basics:

- Understand the topic: Read up on the general topic of the colloquium. Familiarize yourself with the key concepts and terminology.
- Identify the speakers: Find out who will be presenting. Research their backgrounds and previous work to get a sense of their expertise and perspective.

2. Set Clear Goals:

- Determine what you hope to achieve by attending the colloquium. Are you looking to learn about new research, network with colleagues, or gain inspiration for your own work?

3. Pre-read Materials:

- If the organizers provide pre-read materials or if the speaker will discuss specific papers, make sure to go through them. This will give you a deeper understanding of the topics that will be discussed.

4. Prepare Questions:

- Think of questions you might want to ask the speakers or panelists. This will help you engage in discussions and gain a better understanding of the content.

5. Bring Essential Supplies:

- Bring a notebook, pens, or a laptop to take notes during the presentations. Also, have business cards or contact information ready for networking.

During the event consider the following, especially if it is a presentation on a topic directly related to your research:

6. Engage Actively:

- Pay close attention during the presentation. Take notes and ask questions when appropriate. Engaging actively will help you learn more and make connections.

7. Network:

- Take advantage of breaks and networking sessions to connect with the speaker. Share your interests and listen to theirs. Networking can lead to valuable collaborations and opportunities.

After the event, it might be important to:

8. Follow Up:

- If you are genuinely interested, follow up with the speaker. Send thank-you emails, or schedule meetings to continue discussions, etc..

9. Reflect and Apply:

- Take time to reflect on what you learned and how it can be applied to your work or research. Implementing new ideas or strategies can be a significant benefit of attending colloquia.

Evaluation

This is a pass or fail course. To pass this course, you will need to participate in most of the colloquiums and seminars. However, you must participate in all the events in your field.

For each each colloquium/seminar week:

- you will work on points (1,2,3,5) by yourself.

For all the colloquiums or for each seminar in your research area:

- you will prepare one of more relevant and thoughtful questions (point 4) and submit it on Black Board (Bb) before 10am of the day of the colloquium/seminar. Late submissions will not be accepted.

For at least the colloquiums and seminars in your research area:

- you will ask the questions you prepared (point 6); but it is ok asking a different question if what you prepared is not as relevant as you imagined.

You will get a grade between 0 and 100 points in each colloquium/seminar. You will need a final grade equal or above 80 to pass.

Research topics

Please complete this form to choose a research area for the purpose of this course.

<https://forms.gle/skxRDY2MFWAwX7eUA>

Class Attendance and Missed Work:

A minimum attendance of 80% is needed to pass this course, which means 2 absences at most. Moreover, it is your responsibility to sign the attendance list, which I will have with me. I will use the same list to register whether you ask relevant questions when you are expected to.

Absences from class and missed work are accommodated (excused) in exceptional circumstances (illness, etc.). Please reach out and provide supporting evidence.

Academic Integrity:

Academic integrity is an important value at UMBC. By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal.