

Subject to Modification – Nov. 4, 2022

**PHYSICS 5941 – COLLOQUIUM**  
**Syllabus Fall 2022**

**Dr. David Shiner (shiner@unt.edu)**

**Office: Physics 324 Phone: 565-3874.**

**Office Hours: MF 1:50-2:50 pm or by appointment**

**Class time: Tu 3:30-4:40 pm**

**Class location: Physics Room 104**

<u>Content:</u>	Weekly lectures by faculty and invited guests.
<u>Objective</u>	To learn from live and in person presentations with questions and answers on research and topics of interest in contemporary physics.
<u>Office Hours</u>	My office is on the third floor of the physics building (room 326), phone number is 565-3874, email is <a href="mailto:shiner@unt.edu">shiner@unt.edu</a> . Office hours are MF 1:50 - 2:50 am or by appointment.
<u>Grading</u>	The course grading is Pass/Fail only. Grading is based on in person attendance.
<u>Course Grade</u>	Pass: 75% or better attendance      Fail: Below 75% attendance

**You are responsible for modifications to this syllabus and any other information presented in class.**

*The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time, however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the Office of Disability Accommodation website at <http://www.unt.edu/oda>. You may also contact them by phone at [940.565.4323](tel:940.565.4323). UNT's policy on Academic Dishonesty can be found at: <http://www.vpaa.unt.edu/academic-integrity.htm> Drop information is available in the schedule of classes at: <http://essc.unt.edu/registrar/schedule/scheduleclass.html>*

***The Student Perceptions of Teaching (SPOT) is a requirement for all organized classes at UNT. This short survey will be made available to you on-line at the end of the semester and will provide you with an opportunity to provide feedback to your course instructor. SPOT is considered to be an important part of your participation in this class. In addition to SPOT, there will be a brief in-class course survey during the last two weeks of the semester. For the Spring 2017 semester you will receive an email in April 2017 from "UNT SPOT Course Evaluations via IASystem Notification" ([no-reply@iasystem.org](mailto:no-reply@iasystem.org)) with the survey link. Please look for the email in your UNT email inbox. Simply click on the link and complete your survey.***

*After logging in to the [my.unt.edu](http://my.unt.edu) portal, students can access the SPOT survey site by clicking on the SPOT icon. A list of their currently enrolled courses will appear. Students complete each course evaluation independently. During the long terms, the SPOT is open for students to complete two weeks prior to final exams. During the summer terms, the SPOT is open for students to complete six days preceding their final exam. See [SPOT Calendar](#) for specific dates and deadlines.*

<u>Date</u>	<u>Speaker</u>	<u>Institution</u>	Title (or provisional description)
Aug. 30	Dr. Jingbiao Cui	University of North Texas	“Welcome and introduction to faculty and physics research at the University of North Texas”
Sept. 6	Dr. Yun Jing	Penn State University	“Bilayer photonic and phononic graphene: a new playground for twistronics”
Sept. 13	Dr. Marcella Clinard	University of North Texas	“Diversity, equity, and inclusion in physics”
Sept. 20	Dr. Yuri Rostovtsev	University of North Texas	“Quantum optics in various materials: transparency, Har Gen, quantum corr, and Freq Dwn Conv”
Sept 27	Dr. Bibhu Rout	University of North Texas	“Materials micro-analysis and modifications using energetic ion beams”
Oct. 4	Dr. Tara Drozdenko	American Physical Society	“The growing danger of nuclear weapons (and what physicists can do about it)”
Oct. 11	Dr. Jin Hu	University of Arkansas	“Engineering topological electronic states in layered materials”
Oct. 18	Dr. Bogdan Popa	University of Michigan	“Active acoustic metamaterials”
Oct. 25	Dr. Priyanka Agrawal	University of North Texas	“Microstructure and mechanical properties control of additively manufactured metallic materials”
Nov. 1	Edward S. Bielejec	Sandia National Laboratories	“Sandia’s Ion Beam Laboratory: An overview of focused ion beam implantation for quantum applications”
Nov. 8	Dr. Nevin Weinberg	Univ. of Texas Arlington	“Powerful tides and nonlinear waves in stars and planets”
Nov. 15	Dr. David Lowell	Raytheon Corporation	“From Studying Physics to Building Remote Sensing Payloads”
Nov. 22	No Colloquium	Day before Thanksgiving break	
Nov. 29	Dr. Michele Galizia	University of Oklahoma	“Fundamental study of small molecule transport in polymers as a tool to discover next generation membrane materials”
Dec. 6	Dr. John Wise	Georgia Institute of Technology	“The first stars, black holes, and galaxies in the Universe”