Center for Research and Training in the Sciences (UTSA),
Institute for Integration of Medicine & Science (UTHSA),
Translational Science Graduate Program, &
UTSA-UTHSA Joint Graduate Program in Biomedical Engineering
invite you to attend



## **Presents**

Dose Enhancement by Gold Nanoparticles in Radiation Therapy

Radiation therapy has long been one of oncologists' most effective weapons against cancer, and today's state-of-the-art technology allows medical physicists to tailor advanced patient-specific treatments. However, new radiation therapy methods which can increase the local effectiveness of tumor cell killing while sparing healthy tissues are still needed. Due to gold's high atomic number, gold nanoparticles exhibit strong interactions with the X-ray photons used in radiation therapy, leading to localized radiation dose enhancement. This dose enhancement is being systematically investigated in a collaborative project between physicists at the University of Texas at San Antonio and medical physicists at University of Texas Health San Antonio's Mays MD Anderson Cancer Center.



## Kathryn (Katie) Mayer, PhD

Associate Professor Department of Physics and Astronomy University of Texas at San Antonio





Friday, Janauary 19, 2024 Virtually from 9:00 AM - 10:00 AM

For information on participating in the current monthly seminar, please head to <a href="https://utsa.edu/crts/strech/">https://utsa.edu/crts/strech/</a> or scan the QR code below



