

# IQSE AMO QO Seminar Series

Tuesday, February 14th, 11:30 am ZOOM &  
IQSE seminar room (MPHY 578)

Pizza will be served for IQSE members at 11:00 am. The talk will start around 11:30 am

## Dr. Zhenhuan Yi

(Institute for Quantum Science and Engineering, Texas  
A&M University)

### Opportunities in Laser-plasma Interaction Experiments with High Power Ultrashort Laser Pulses

**EVENT DETAILS:** Generating high peak power laser pulses has been a hot pursuit for decades, as highlighted by the 2018 Nobel prize in physics and recent news from the National Ignition Facility. Tera-Watt and Peta-Watt pulses have been achieved with Chirped Pulse Amplification techniques. Amplification by stimulated Raman scattering may be a key to the next generation of higher peak power lasers. IQSE's high-power synchronized picosecond and femtosecond pulse lasers have facilitated many fundamental researches and applications of high-power pulses. This talk will overview the systems and researches conducted as well as future plans to stimulate discussions and collaboration opportunities.

**ABOUT THE SPEAKER:** Zhenhuan Yi is a Research Assistant Professor at the Department of Physics and Astronomy and at the Institute for Quantum Science and Engineering, Texas A&M University. His research interests include bio-photonics; tip/surface-enhanced Raman/coherent Raman; Low frequency/Tera Hertz Raman; Coherent Anti-Stokes Raman (FAST-CARS/MIRA CARS) detection of molecules; Remote sensing; Gain-swept backward lasing effect; Atomic physics, Superfluorescence and superradiance in atomic systems, Laser induced breakdown/plasma; Quantum Informatics, Quantum State manipulation and transmission;

#### **ZOOM information:**

<https://tamu.zoom.us/j/98156251523?pwd=QVdSdGxtL1UyY0g1L083SU5QR0QrUT09>

Meeting ID: 981 5625 1523

Passcode: 297578

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