

# IQSE AMO QO Seminar Series

Tuesday, March 1, 11:30 AM CST, ZOOM&IQSE  
seminar room (MPHY 578)

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

## Anatoly Svidzinsky

*IQSE, Texas A&M University, College Station, Texas*

### Construction of classical field theories from the first principles

I will give a tutorial on derivation of Classical Electrodynamics and General Relativity from the first principles (postulates) as a demonstration of how physical theories are constructed. I will also discuss a possibility of existence of a hypothetical scalar field coupled to the electromagnetic field and observable effects this field can produce. A hypothetical axion is an example of such field which has been postulated by Peccei and Quinn in 1977 to resolve the strong CP problem in quantum chromodynamics, and since then became one of the leading candidates for the cold dark matter in the universe

#### **ZOOM information:**

<https://tamu.zoom.us/j/99696662195?pwd=NIFUZFPvamR6YlIBUUZROFVReFhkQT09>

Meeting ID: 996 9666 2195

Passcode: 757350

162.255.37.11 (US West)

162.255.36.11 (US East)

Join by Skype for Business: <https://tamu.zoom.us/skype/99696662195>