



Contribution ID: **108**

Type: **Invited Talk**

## Fundamental symmetries and exotics physics in atoms

*Tuesday 22 October 2019 14:30 (30 minutes)*

The extraordinary advances in quantum control of matter and light have been transformative for precision measurements with atoms. For example, the development of atomic clocks enabled searches for the variation of fundamental constants, dark matter, violations of Einstein equivalence principle, and other applications. I will give an overview of precision fundamental studies with atoms focusing on clock applications and discuss prospects for significantly improved sensitivity with highly charged ions and a nuclear clock. Recent advances in testing Lorentz invariance in the electron-photon sector are presented.

**Author:** SAFRONOVA, Marianna (University of Delaware)

**Presenter:** SAFRONOVA, Marianna (University of Delaware)

**Session Classification:** Session