

Ultrashort Pulse Characterization

Selcuk Akturk
Athens, Greece

Intended Audience:

This course is intended for any scientists and engineers, from academia and industry, interested in learning about how to measure ultrashort laser pulses, with theoretical and practical perspectives.

Benefits and learning objectives

Upon completion of this course, the student should have an understanding of:

- Fundamental principles and challenges in ultrashort pulse characterization
- How to properly describe ultrashort laser pulses
- The idea of autocorrelation
- How does methods like FROG and SPIDER extract the intensity and phase information
- Computational methods accompanying characterization techniques
- Limitations and caveats for each method
- How to develop experiment tools in extreme cases such as single-cycle regime