Advanced Physics and Applications of Optical Fibers

Will give you the opportunity to study applications of fiber optics and laser technology

This course is a continuation of its prerequisites and aims to provide a deeper understanding of nonlinear phenomena in optical fibers.

You may choose to work with a modern simulation tool RP Fiber Power from RP Photonics to understand the operation of a high-power fiber amplifier or laser.

The main part is a research project related to fiber lasers, supercontinuum generation or fiber sensors for which the **student returns a report and gives a presentation**. **Also includes home exercises**.

Excursion to the laser lab led by prof. Markku Vainio in the Kumpula Campus is part of the course.

Passing the course

Home exercises: 10 %

Grade share:

Presentation: 40 %

Report: 50 %