

Prof Ona Balachninaite

Faculty of Applied Physics and Mathematics invites all Students, Staff and Guests to the classes with Prof Ona Balachninaite from the Faculty of Physics of Vilnius University and Laser Research Center in Lithuania. Prof Balachninaite is visiting us within the frame of the Erasmus+ programme.

Lectures:

- 1) **Radiative transitions and emission linewidth; Radiation and thermal equilibrium; Absorption, spontaneous and stimulated emission; Einstein coefficients. Population inversion;**
Tuesday 09.04.19, 13:15, room 3/07 Nanotechnology Centre
- 2) **Small signal gain; Gain saturation; Development and growth of a laser beam; Requirements for obtaining population inversion;**
Wednesday 10.04.19, 9:30, room 3/10 Nanotechnology Centre
- 3) **Introduction to modern physics - Absorption, spontaneous and stimulated emission; Einstein coefficients.**
Friday 12.04.19, 9:15, 121 Main Building
- 4) **Laser pumping requirements and techniques. Laser cavity and its effect on lasing, Longitudinal laser cavity modes, Transverse modes, Stable and unstable laser cavities;**
Friday 12.04.19, 11:30, room 3/10 Nanotechnology Centre

Short BIO (facts & figures) of Assoc. Prof Ona Balachninaite

Associate Professor in experimental Laser Physics. PhD in Physics 2004. Experimentalist with a background in laser physics, laser-matter interaction and nonlinear optics. Author of over 25 scientific publications that cover nonlinear optics, optical metrology, laser-induced breakdown spectroscopy, femtosecond laser micromachining. Coauthor of one international patents. Local coordinator of the 7th EU Framework Programme project "Integrated European Laser Laboratories (LASERLAB-Europe)" in Lithuania. Supervisor of more than 20 individual research projects with undergraduate and graduate students. Chair of international conferences. Reviewer of several international scientific journals. Current fields of interest: laser-induced breakdown spectroscopy, femtosecond laser micromachining.

