



Universidade do Minho



5. Curricular Unit

Advanced Physics Topics 1

Module

Nonlinear Optics (NO)

Type

Tutorial

Contact hours

18

Professor/Researcher in charge

Michael Belsley, U. Minho

Summary of Contents

From linear to nonlinear optics
Propagation of optical beams in the linear regime
Propagation of optical beams in the nonlinear regime
Second harmonic generation
Three wave mixing
The optical Kerr Effect
Two photon absorption, third harmonic generation
Ultrafast pulse generation

Evaluation

Homework problems and a Final exam

Jury

Cancelled Module due to sick leave of teacher in charge