



Quantum Efficiency Seminar und Colloquium

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Optics in semiconductor quantum structures of complex dimensionality

ABSTRACT: Quantized structures exist currently in well-defined 1-, 2-, 3-dimensionally confined geometries. We discuss hybrid quantum structures which are based on intelligently designed, artificially created systems of mixed dimensionality. Single-particle spectroscopy, temperature-dependent emission and ultrafast recombination dynamics have been measured along with numerical simulations of scattering rates to understand the influence of 0D, 1D and 2D quantization and size and shape variation on linear and nonlinear-optical properties.

Date: Tuesday, January 24th, 2012 16:15 pm
Location: Lecture Hall 1, Hermann-Herder-Str. 3, Freiburg

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