



MATHEON Workshop
8th Annual Meeting “Photonic Devices”
17./18.2.2015, Zuse Institute Berlin



Tuesday

Opening of the joint lab BerOSE

10:00	T. Frederking	HZB	
10:10	C. Schütte	FU/ZIB	
10:20	S. Burger	ZIB	
10:30	F. Abdi	HZB	Tandem structure and plasmonic enhancement in photoelectrochemical water splitting
11:10	S. Matera	FU	From electronic structure to macroscopic flow patterns
11:30	M. Hammerschmidt	ZIB	A reduced basis method for fast optical simulations
11:50	lunch break		
13:00	N. Gregersen	DTU	Single-photon source engineering using a modal method
13:40	J. Petráček	BUT	Simulation of photonic structures by an eigenmode expansion method
14:20	coffee break		
15:00	F.-J. Haug	EPFL	An adapted modal method for solar cells with sinusoidal interfaces
15:40	P. Losio	ZHAW (formerly TelSolar)	Simulation of thin film silicon solar cells in industry
16:20	P. Manley	HZB	Coherent, or Incoherent- that is the question (for light management)
16:40	coffee break		
17:20	K. McPeak	ETHZ	Plasmonic Chiral Colloids from High-Index Off-Cut Silicon Wafers
18:00	C. Barth	HZB	Near-field enhancement in large-area Si-photonic crystals
Plenary Talk			
18:20	B. Rech	HZB	Challenges in solar energy research
19:30	Joint Dinner		

Sponsor





Wednesday

Begin	Speaker	Institute	Title
10:00	S. Reitzenstein	TUB	Advanced Quantum Light Sources: Modelling and Realization by Deterministic Nanofabrication Technologies
10:40	T. Lopez	Philips	Modeling of light emitting diodes
11:20	G. Kewes	HU	A Fully Analytic Nanolaser Model - Towards Numerical Implementation
11:40	lunch break		
13:00	J. Lott	TUB	Numerical and experimental studies of leading-edge and emerging VCSELs.
13:40	Shchukin	VI Systems	Engineering of optical modes in semiconductor lasers by placement of oxide apertures
14:00	P. Kristensen	HU	Quasinormal modes in coupled cavity-waveguide systems
14:20	coffee break		
15:00	L. Poulidakos	ETHZ	Finite Element Simulations of the Optical Chirality for Plasmonic Nanostructures
15:20	S. Heidenreich	PTB	Bayesian approach to the statistical inverse problem of scatterometry
15:40	V. Soltwisch	PTB	Dynamic Bragg-like scattering in GISAXS from rough line gratings
16:00	coffee break		
17:00	K. Jäger	HZB/TU Delft	Finite elements simulations of thin-film solar cells with randomly nanotextured interfaces
17:00	J. Bischoff	Osires Optical Engineering	Modal Methods with non-orthogonal coordinates
17:20	B. Wohlfeil	ZIB	Grating coupler for spatial division multiplexing (SDM)