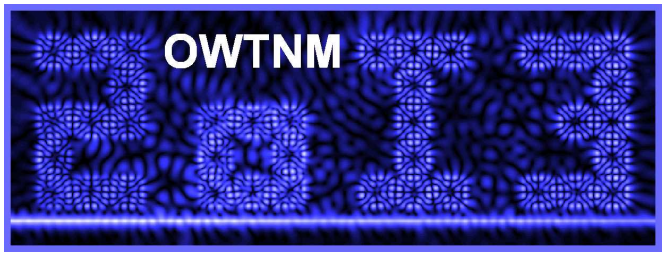

XXI International Workshop on Optical Wave & Waveguide Theory and Numerical Modelling

University of Twente, Enschede, The Netherlands, April 19 – 20, 2013

Friday, April 19, 2013

	08:00 – 16:00 *Registration*
08:55	Welcome address
09:00 – 10:15	O-1: Methods & algorithms I
	Coffee break
10:45 – 12:00	O-2: Active structures
	Lunch
13:00 – 14:15	O-3: Functional devices
	Coffee break
14:45 – 16:00	O-4: Nanophotonics
	Drinks
16:00 – 18:00	Poster session
19:00	*Workshop dinner*

Saturday, April 20, 2013

	08:30 – 10:00 *Registration*
09:00 – 10:15	O-5: Methods & algorithms II
	Coffee break
10:45 – 12:00	O-6: Metamaterials & nanostructures
	Lunch
13:00 – 14:15	O-7: Physical phenomena
	Coffee break
14:45 – 16:00	O-8: Plasmonics
16:00	Closing remarks

Friday, 09:00 – 10:15: *Methods & algorithms I*

09:00 – 09:30	O-1.1	P.A. Postigo (invited), *Three-dimensional finite-difference time-domain (3D-FDTD) methods for photonic crystal lasers, solar cells and quantum nanophotonics*
09:30 – 09:45	O-1.2	M. Maksimovic, *Resonances in high-contrast gratings with complex unit cell topology*
09:45 – 10:00	O-1.3	D.D. El-Mosalmy, M. Farhat, O. Hameed, N.F.F. Areed, S.S.A. Obayya, *Radial basis function neural network based optimization approach for photonic devices*
10:00 – 10:15	O-1.4	C. Kluge, L.T. Neustock, J. Adam, M. Gerken, *Calculation of leaky-wave radiation from compound binary grating waveguides*

Friday, 10:45 – 12:00: *Active structures*

10:45 – 11:15	O-2.1	M. Pollnau, M. Eichhorn (invited), *Theory of lasing resonators: Quality factor and line width*
11:15 – 11:30	O-2.2	A. Liu, J. Pond, *Nonlinear and gain simulation in waveguide systems: methods and applications*
11:30 – 11:45	O-2.3	S. Malaguti, G. Bellanca, A. Bazin, F. Raineri, R. Raj, S. Trillo, *Hybrid III-V semiconductor/silicon three-port Filter on 1D-PhC wire*
11:45 – 12:00	O-2.4	J. Ctyroky, *Full-vector analysis of photonic structures with a balance of loss and gain*

Friday, 13:00 – 14:15: *Functional devices*

13:00 – 13:30	O-3.1	T. Mizumoto, Y. Shoji (invited), *Magneto-optical nonreciprocal devices on silicon*
13:30 – 13:45	O-3.2	M. Farhat, O. Hameed, A.M. Heikal, S.S.A. Obayya, *Passive polarization rotator based on spiral photonic crystal fiber*
13:45 – 14:00	O-3.3	B.B. Oner, M. Turduev, I.H. Giden, H. Kurt, *Enhancing light manipulation by graded index photonic crystal media*
14:00 – 14:15	O-3.4	A.-L. Fehrembach, K. Chan Shin Yu, A. Monmayrant, O. Gauthier-Lafaye, P. Arguel, A. Sentenac, *1D crossed guided mode resonant gratings for tunable filtering*

Friday, 14:45 – 16:00: *Nanophotonics*

14:45 – 15:15	O-4.1	J. Knoester (invited), *Collective optical excitations in self-assembled molecular nanotubes for light-harvesting*
15:15 – 15:30	O-4.2	V. Grigoriev, A. Tahri, S. Varault, B. Rolly, B. Stout, J. Wenger, N. Bonod, *Decomposition of Mie scattering coefficients and polarizabilities of nanoshell structures into Lorentzian resonances*
15:35 – 15:45	O-4.3	S. She, Y.Y. Lu, *Extraordinary optical transmission through circular metallic cylinder arrays*
15:45 – 16:00	O-4.4	D. Ketzaki, O. Tsilipakos, T.V. Yioultsis, E.E. Kriezis, *Electromagnetically induced transparency with hybrid silicon-plasmonic traveling-wave resonators*

Saturday, 09:00 – 10:15: *Methods & algorithms II*

09:00 – 09:30	O-5.1	K. Busch (invited), *Discontinuous Galerkin methods in nano-photonics*
09:30 – 09:45	O-5.2	A.A. Shcherbakov, A.V. Tishchenko, *Generalized source method in curvilinear coordinates*
09:45 – 10:00	O-5.3	K. Gehlot, A. Sharma, *Modified optimal variational method to study modal characteristics of Si photonic wire waveguides*
10:00 – 10:15	O-5.4	M. Blome, K. McPeak, S. Burger, F. Schmidt, *Back-reflector optimization in thin-film silicon solar cells by rigorous FEM light propagation modeling*

Saturday, 10:45 – 12:00: *Metamaterials & nanostructures*

10:45 – 11:15	O-6.1	F. Lederer, S. Muhlig, C. Rockstuhl, R. Alaee, C. Menzel (invited), *Tailoring meta-atoms for specific metamaterial applications*
11:15 – 11:30	O-6.2	J. Benedicto, E. Centeno, A. Moreau, *Lens equation for flat lenses made with hyperbolic metamaterials*
11:30 – 11:45	O-6.3	S. Bin Hasan, C. Etrich, R. Filter, C. Rockstuhl, F. Lederer, *Tailoring the quadratic response of nanoantennas: use of a waveguide model*
11:45 – 12:00	O-6.4	P.J. Compaijen, V.A. Malyshev, J. Knoester, *Transmission of optical excitations through a linear chain of metal nanoparticles in the presence of a reflector*

Saturday, 13:00 – 14:15: *Physical phenomena*

13:00 – 13:30	O-7.1	J.L. O'Brien & collaborators (invited), *Integrated quantum photonics*
13:30 – 14:00	O-7.2	W.L. Vos (invited), *Looking in and through opaque material*
14:00 – 14:15	O-7.3	A.V. Tishchenko, O. Parriaux, *Intriguing relations between "pseudo-Brewster incidence" and the plasmon mode at a metal surface*

Saturday, 14:45 – 16:00: *Plasmonics*

14:45 – 15:15	O-8.1	Z. Han, S.I. Bozhevolnyi (invited), *Modelling of plasmonic waveguides*
15:15 – 15:30	O-8.2	W. Walasik, Y. Kartashov, G. Renversez, *Plasmon-soliton waves: towards realistic modelling*
15:30 – 15:45	O-8.3	P. Kwiecien, J. Ctyroky, I. Richter, *Hybrid dielectric plasmonic slot guiding nanostructures — analysis with Fourier modal methods*
15:45 – 16:00	O-8.4	A. Alparslan, Ch. Hafner, *Analysis of layered media plasmonic waveguides by Multiple Multipole Program*

Supporting companies & institutions, posters on display:

owtnm13.ewi.utwente.nl

Friday, 16:00 – 18:00: Poster session

P-01	D.K. Sharma, A. Sharma, *Low-loss splicing of microstructured optical fibers and single-mode fibers: an analytical study*
P-02	K. Gehlot, A. Sharma, *Simple analytical approach to optimize structure parameters of photonic crystal waveguide coupler*
P-03	A. Parini, G. Calo, G. Bellanca, V. Petruzzelli, *Vertical links for multilayer optical-networks-on-chip topologies*
P-04	Q. Cao, S. Li, D. Teng, H. Gao, *A terahertz waveguide coupler with a tapered dual elliptical metal structure*
P-05	P. Kwieicen, V. Kuzmiak, I. Richter, J. Ctyroky, *Nonreciprocal waveguiding EM surfaces and structures for THz region*
P-06	A.M. Heikal, M. Farhat, O. Hameed, S.S.A. Obayya, *Coupling characteristic for novel hybrid long-range plasmonic waveguide including bends*
P-07	S.I.H. Ibrahim, S.S.A. Obayya, *Novel mixed finite element method analysis of leaky photonic nanowires*
P-08	S.I.H. Ibrahim, S.S.A. Obayya, R. Letizia, *Efficient bidirectional beam propagation method for multiple longitudinal optical waveguide discontinuities*
P-09	R. Stoffer, *Mode Polishing for 3D Finite Element BPM*
P-10	M.G. Can, B.B. Oner, H. Kurt, *Numerical modeling of human eye with electromagnetic approach*
P-11	A.-L. Fehrembach, A. Sentenac, *A vectorial simplified model for Fano resonances of guided-mode resonant gratings*
P-12	A.-L. Fehrembach, D. Shu, E. Popov, *Electro-optic effect in guided mode resonance gratings for tunable narrow-band filtering*

Friday, 16:00 – 18:00: Poster session

P-13	A. Auditore, M. Conforti, C. De Angelis, A.B. Aceves, *Solitons in binary waveguide arrays*
P-14	Vinita, A. Kumar, V. Rastogi, *Bandgap maps for photonic crystal with honeycomb lattice for different shapes of scatterers*
P-15	Z. Hu, Y.Y. Lu, *Standing waves on periodic arrays of circular dielectric cylinders*
P-16	Babita, V. Rastogi, *Design and analysis of a low cost highly sensitive refractive index sensor*
P-17	H.J.W.M. Hoekstra, *Integrated optics refractometry: sensitivity in relation to spectral shifts*
P-18	F. Civitci, M. Hammer, H.J.W.M. Hoekstra, *Reflection of semi-guided plane waves at angled thin-film transitions*
P-19	S.F. Helfert, *Time domain method of lines*
P-20	M.A. Botchev, *Matrix exponential and Krylov subspaces for fast time domain computations: recent advances*
P-21	J.P. Epping, M. Kues, P.J.M. van der Slot, C.J. Lee, C. Fallnich, K.-J. Boller, *Numerical modeling of seeded FWM in silicon nitride waveguides for CARS*
P-22	E.K. Sharma, J. Anand, *Propagation of a periodic sequence of Gaussian pulses in a coaxial optical fiber: occurrence of "Talbot Effect" in the time domain*
P-23	S.G. Moiseev, V.A. Ostatochnikov, D.I. Sementsov, *The peculiarities of optical spectra of photonic crystal with plasmonic defect*
P-24	G. Boudarham, B. Rolly, B. Stout, R. Abdeddaim, J.M. Geffrin, N. Bonod, *Manipulating light matter interaction with Mie resonators*