

# POSTER PRESENTATIONS

## POSTER SESSION 1

Monday February 21, 2005

- Mo-1** N. Akopian, S. Vilan, E. Ehrenfreund and D. Gershoni, B. Gerardot, P. M. Petroff, *Semiconductor quantum dots: sources of entangled photon pairs*
- Mo-2** Yves Ménesguen, Sylvain Barbay and Robert Kuszelewicz, *Thermal management of a large-area VCSEL under optical pumping*
- Mo-3** T. Grunzweig, M. F. Andersen, A. Kaplan, and N. Davidson, *Fidelity in atom optics billiards with chaotic and mixed dynamics*
- Mo-4** P. Nandakumar, A. Kovalev, M. Köhler and A. Volkmer, *Multiplex CARS Microspectroscopy of a Stratum Corneum Model System*
- Mo-5** Y. Lahini, D. Mandelik and Y. Silberberg, *Nonlinearly induced cooling in a two-level system*
- Mo-6** Avi Pe'er, Barak Dayan, Marija Vucelja, Yaron Silberberg and Asher A. Friesem, *Quantum lithography with classical light*
- Mo-7** Y. Rosenwaks, A. Agronin, M. Molotskii, D. Dahan, and G. Rosenman, *Nanoscale Domain Engineering in Ferroelectric Crystals for Nonlinear Optical Applications*
- Mo-8** Mark I. Stockman, David J. Bergman, Sophie Brasselet and Joseph Zyss, *Enhanced Second-Harmonic Generation by Complex Metal Nanostructures*
- Mo-9** R. Ozeri, M. D. Barrett, R. B. Blakestad, J. Britton, D. Hume, W. M. Itano, J. D. Jost, E. Knill, C. Langer, D. Leibfried, R. Reichle, T. Schaetz and D. J. Wineland, *Ground-state Coherence in the Presence of Spontaneous Scattering of Photons*
- Mo-10** Thomas Polack, Nirit Dudovich, Avi Pe'er and Yaron Silberberg, *Coherent control with real fields: Applying weak-field strategies to the strong-field regime*
- Mo-11** R. Pugatch, N. Katz, E. Rowen, and N. Davidson, *Dynamics of the order parameter in a rapid quench from the Mott-insulator to the superfluid regime*
- Mo-12** Zeev Fradkin, Ron Naaman, Dan Oron, Yaron Silberberg, *Coherent control of photoemission*
- Mo-13** Y. Linzon, I. Ilsar, D. Cheskis, R. Morandotti, J.S. Aitchison and S. Bar-Ad, *Near-field imaging of nonlinear pulse propagation in planar silica waveguides*
- Mo-14** T. O. Shegai and G. Haran, *Polarization Study of Surface-enhanced Raman Scattering of Individual Rhodamine-6G Molecules.*

- Mo-15**      **E. Rowen, N. Katz, R. Ozeri, R. Pugatch and N. Davidson,** *Dressed-state approach to matter-wave mixing of Bosons*
- Mo-16**      **Mark Y. Vilensky, Yehiam Prior, and Ilya Sh. Averbukh,** *Laser Cooling In A Feedback-Controlled Optical Shaker*
- Mo-17**      **S. Moscovich, A. Agronin, A. Arie, Y. Rosenwaks and G. Rosenman,** *Nonlinear and electro-optic applications of sub-micron poled ferroelectric crystals*
- Mo-18**      **M. Shuker, Y. Sagi, A. Ben-kish, A. Fisher, A. Ron, N. Davidson,** *Decoherence Rates Measurement in Light Storage Medium*
- Mo-19**      **R. Arun, I.Sh. Averbukh, and T. Pfau,** *Nano-lithography using multilayer light masks*
- Mo-20**      **E. Shumakher and G. Eisenstein,** *Mutual Injection Locking of Microwave and Optoelectronic Oscillators*
- Mo-21**      **G. Martin, A. Donval, E. Toussaere, R. Hierle and J. Zyss, T. Katchalski, G. Levy-Yurista, and A.A. Friesem,** *Electrooptic light modulation with polymeric resonant grating waveguide structures*
- Mo-22**      **Yuri Paskover and Yehiam Prior,** *Population transfer enhancement in pump-dump experiments*
- Mo-23**      **Y. Sivan G. Fibich, M.I. Weinstein,** *Self focusing in a medium with nonlinear microstructure*
- Mo-24**      **S. Stepanov, S. Ruschin, and R. Herskowits,** *Near-infrared optical amplification by non homogeneous heating of silicon*
- Mo-25**      **M. Trippenbach and M. Matuszewski, E. Infeld, B. A. Malomed,** *Fully three dimensional breather solitons can be created using Feshbach resonance*
- Mo-26**      **Kaiyin Zhang, Alexander Milner and Yehiam Prior,** *Femtosecond laser material processing: how short is short?*
- Mo-27**      **I. Friedler, D. Petrosyan, G. Kurizki and M. Fleischhauer,** *Giant interaction and entanglement of slow-light photons*
- Mo-28**      **Mark Keil, Qun Zhang, and Moshe Shapiro,** *Coherent Control and the Phase Locking of Two-Photon Processes*
- Mo-29**      **Timothée Toury, Alexandre Garnier, Sophie Brasselet, Joseph Zyss,** *Electro-optic confocal microscopy: a new instrument for high resolution electric field mapping in molecular and biomaterials*
- Mo-30**      **D. Dahan ,E. Shumakher and G. Eisenstein,** *A Self Starting Ultra Low Jitter Pulse Source Based on Coupled Optoelectronics Oscillators with an Intracavity Fiber Parametric Amplifier*

- Mo-31** **Milan Sindelka and Nimrod Moiseyev**, *Theory beyond the dipole approximation of cold atoms in an electromagnetic field: Formation of optical lattices due to quadrupole interactions*
- Mo-32** **B. D. Fainberg and V.A. Gorbunov**, *Coherent control and spectroscopy of non-radiative transitions: long-range electron transfer*
- Mo-33** **Avner Fleischer, Milan Sindelka and Nimrod Moiseyev**, *Adiabatic theorem for non-hermitian time-dependent non-periodic systems*

**POSTER SESSION 2****Tuesday, February 22, 2005**

- Tu-1**      **T. Dadosh, G. Haran, J. Sperling, A. Yacoby, and I. Bar-Joseph,** *Raman Scattering From a Single Molecule between Two Metal Nanoparticles*
- Tu-2**      **Dan Oron, Eran Tal, Yaron Silberberg,** *Scanningless depth resolved microscopy by temporal focusing of ultrashort pulses*
- Tu-3**      **H. Buljan, M. Segev, and A. Vardi,** *Incoherent matter-wave solitons: Mutual self-trapping of a Bose-Einstein condensate and its surrounding thermal cloud*
- Tu-4**      **Tal Schwartz, Tal Carmon, Hrvoje Buljan and Mordechai Segev,** *Spontaneous pattern formation with incoherent “white” light*
- Tu-5**      **Barbaya, I. Perrinib, T. Maggipintob, M. Brambillab and R. Kuszelewicz,** *Microscopic model of the susceptibility of semiconductor quantum dots as a Kerr-like medium for optical self organization*
- Tu-6**      **Mélanie Lebental, Tahar ben Messaoud, Angela Vella and Joseph Zyss,** *Polymer Based Non Circular Micro-Billiard Lasers: A Benchmark for Nonlinear Dynamics And Chaos*
- Tu-7**      **Richard S. Tasgal, Y. B. Band, Boris A. Malomed,** *Third-harmonic generation gap solitons*
- Tu-8**      **Guy Bartal, Oren Cohen, Hrvoje Buljan, Jason W. Fleischer, Ofer Manela, Mordechai Segev,** *Brillouin-zone spectroscopy of nonlinear photonic lattices*
- Tu-9**      **Barak Freedman, Guy Bartal, Mordechai Segev, Demetrios N. Christodoulides and Jason W. Fleischer,** *Optical Quasi Crystals – Properties and Dynamics*
- Tu-10**     **Tania Konry and Robert S. Marks,** *Physico-chemical studies of ITO-coated fiber-optics biosensor*
- Tu-11**     **Preben Buchhave and Mikael Lassen,** *Convective structures in 2nd order nonlinear media with walk-off*
- Tu-12**     **V. Szöcs, T. Pálszegi, V.Lukeš, J.Sperling,** *Conformation Analysis Of Symmetric Dimer Systems By Comparative Study Of Theoretical Absorption And 2d Photon Echo Electronic Spectra*
- Tu-13**     **A. Ofir, Yu. Kaganovskii, and M. Rosenbluh,** *Surface Enhanced Raman Scattering of Ultra-thin Rhodamine 6G Layers on Ag Nanocrystals*
- Tu-14**     **I. Tikhonenkov and A. Vardi,** *Fermion Superchemistry: Boson-Like Quantum Dynamics of Fermion Association*
- Tu-15**     **Marek Trippenbach, P S. Julienne, C. J.Williams, Y. B. Band,** *Loading Bose condensed atoms into the ground state of an optical lattice*

- Tu-16** **V. A. Yurovsky and A. Ben-Reuven**, *Forming molecular Bose-Einstein condensates by Feshbach resonance under optimizing conditions*
- Tu-17** **Eran Ginossar and Shimon Levit**, *Luminescence of a Semiconductor 2DEG in a Squeezed Vacuum*
- Tu-18** **Gal Kalmani, Pinhas Blau and Ady Arie**, *Optical Frequency Division by Polarization Mixing in a Non-Resonating Optical Parametric Oscillator*
- Tu-19** **David Kviat, Tal Arditi, Shmuel Sternklar and Er'el Granot, Moshe Tur**, *Nonlinear optics with intensity waves*
- Tu-20** **Javier Madronero, Andreas Buchleitner**, *The three-body Coulomb Problem: from 1D to 3D*
- Tu-21** **I. M. Merhasin  $\alpha$  and Boris A. Malomed**, *Gap solitons in a model of a hollow optical fiber*
- Tu-22** **Carlos Viviescas**, *Emission spectrum of chaotic lasers with overlapping resonances*
- Tu-23** **Boris V.Gisin, Ilya Merhasin, Rodislav Driben and Boris A. Malomed**, *Lattice solitons in Kronig-Penney waveguide array with cubic-quintic (CQ) nonlinearity*
- Tu-24** **Alexander Portnov, Evgeny Bepachiansky, Yuval Ganot, Salman Rosenwaks and Ilana Bar**, *Intramolecular Dynamics from Frequency Domain Spectroscopy in the Gas Phase*
- Tu-25** **S. Stepanov, S. Ruschin, J. Zyss and I. Ledoux**, *Tubular dye-polymer waveguides embedded in silicon*
- Tu-26** **Arik Zafrany, Boris A. Malomed, and Ilya M. Merhasin**, *Ordinary solitons and gap solitons in a system with separated nonlinearity and dispersion*
- Tu-27** **T. Pálszegi, V. Szöcs, V. Lukeš, A.Tortschanoff**, *Theoretical Study Of Pump-Probe And Fluorescence Signals Of Two Special Phenylene-Vinylene Dendrimers*
- Tu-28** **Shlomo Sklarz and David Tannor**, *Local Control theory for Unitary transformations: Application to quantum computing without leakage*
- Tu-29** **Dan Huppert, Pavel Leiderman, Liat Genosar and Lior Cohen**, *Excited State Proton Transfer in the Green Fluorescent Protein and its Mutants*
- Tu-30** **A. D. Wilson-Gordon, H. Shpaisman, and H. Friedmann**, *Electromagnetically induced waveguiding in double L systems*
- Tu-31** **Mordechai Katz, David S. Hum, Roger K. Route, and Martin M. Fejer**, *Near-stoichiometric lithium tantalate and near-stoichiometric lithium niobate by Vapor-transport equilibration for frequency conversion applications*
- Tu-32** **Steve Wiesner**, *Measurement of Light Scattering by CaO from 10 to 900 C*

**Tu-33**

**J.M. Benoit, A. Lemaître, G. Patriarche, L. Largeau, O. Mauguin, S. Barbay and R. Kuszelewicz, *High density self-assembled InAlAs/GaAlAs quantum dots as active material for cavity solitons applications***

**Monday February 21<sup>st</sup>, 2005**

**POSTER SESSION 1**

**Mo-1 – Mo-33**

**Tuesday, February 22<sup>nd</sup>, 2005**

**POSTER SESSION 2**

**Tu-1      –      Tu-33**



# Scientific Committee

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