

TUESDAY 22.9.2015



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11:00 Registration

12:00 Lunch

Session 1 Klaas Bergmann / DE

14:00 Opening

14:15 - 15:05 **Nikolay Vitanov**, Sofia/BG **STIRAP in quantum physics and beyond – an overview**

15:10 - 15:40 **Michael Fleischhauer**, Kaiserslautern/DE **STIRAP and dark-state polaritons: from slow and stored light to non-local nonlinear optics**

15:45 - 16:15 **Thomas Halfmann**, Darmstadt/DE **The role of STIRAP for storing light**

16:20 Coffee

Sessions 2 Phil Gould / US

16:50 - 17:20 **Hanns-Christoph Naegerl**, Innsbruck/AT **Photoassociation: STIRAP on molecules at nanokelvin temperatures**

17:25 - 17:55 **Silke Ospelkaus**, Hannover/DE **Reactions of STIRAP-prepared ultracold molecules**

18:00 - 18:15 **Caroline Champenois**, Marseille/FR **Three-photon STIRAP-like scheme for many-atom samples (oral presentation of a poster)**

18:30 Dinner

19:30 - 19:55 Posters

Evening lecture

20:00 - 20:55 **Klaas Bergmann**, Kaiserslautern/DE **Finding STIRAP: was it accidental or planned?**



WEDNESDAY 23.9.2015



Session 3 Eberhard Tiemann / DE

09:15 - 09:45 **Bruce W. Shore**, Livermore/CA, US **Pre-history of the STIRAP concept**

09:50 - 10:20 **Germano Montemazzani**, Metz/FR **STIRAP-like effects in coupled tunable photo-induced waveguides**

10:25 - 10:55 **Alexander Szameit**, Jena/DE **Quantum-optical analogies in waveguide arrays: STIRAP, Bloch oscillations and topological insulators**

11:00 Coffee

Sessions 4 Werner Jakubetz / AT

11:30 - 12:00 **Martin Quack**, Zürich/CH **Coherent population transfer as approach towards detecting parity violation: Theory and current test experiments**

12:05 - 12:35 **Cris Panda**, Cambridge/MA, US **STIRAP in precision experiments: new limits for the electric dipole moment of the electron**

12:45 Lunch

Session 5 Stephane Guérin / FR

14:15 - 14:45 **Giuseppe Falci**, Catania/IT **Coherent population transfer in solid-state nano-architectures: symmetries, decoherence and new strategies**

14:50 - 15:20 **Sorin Paraoanu**, Aalto/FI **Experimental realization of the STIRAP protocol in a superconducting circuit**

15:25 - 15:40 **Vassilios Yannopapas**, Athens/GR **STIRAP in a Quantum System Coupled to a Plasmonic Nanoparticle (oral presentation of a poster)**

15:45 Coffee

Session 6 Frank Vewinger / DE

16:15 - 16:45 **Paul Huillery**, Durham/UK **Strong photon-photon interaction using STIRAP to couple to highly excited Rydberg states**

16:50 - 17:20 **Klaus Moelmer**, Aarhus/DK **Entanglement by STIRAP in Rydberg blockaded ensembles**

17:25 - 17:55 **Christof Wunderlich**, Siegen/DE **STIRAP for preparation of robust qubit states with trapped ions**

18:00 Dinner

19:00 - 19:50 Posters

20:00 - 21:30 Concert **Brass Quintett „Rennquintett“**

WEDNESDAY 23.9.2015

THURSDAY 24.9.2015



THURSDAY 24.9.2015



Session 7		Christof Wunderlich / DE
09:15 - 09:45	Michael Drewsen , Aarhus/DK	The application of STIRAP in ion-based quantum information science
09:50 - 10:20	Gerhard Rempe , Munich/DE	Antiresonance: A continuous STIRAP?
10:25 - 10:55	Axel Kuhn , Oxford/UK	STIRAP-made cavity photons for linear-optics quantum computing
11:00	Coffee	
Sessions 8		Klaus Moelmer / DK
11:30 - 12:00	Stéphane Guerin , Dijon/FR	Processing quantum information on a plasmonic platform driven by STIRAP
12:05 - 12:20	Hailin Wang , Eugene/OR, USA	STIRAP-coupled nano-mechanical oscillators near the quantum limit
12:20 - 12:35	Matthieu Dupont-Nivet ,	Microwaves STIRAP in a Bose-Einstein Condensate (oral presentation of a poster)
12:45	Lunch	
Session 9		Nikolay Vitanov / BG
14:15 - 14:45	Werner Jakubetz , Vienna/AT	Will STIRAP survive in a dense web of vibrational states?
14:50 - 15:20	Leonid Yatsenko , Kiev/UA	Straightforward and more subtle consequence of laser fluctuations on STIRAP efficiency
15:25 - 15:40	David Petrosyan , Heraklion/GR	State transfer in static and dynamic spin chains (oral presentation of a poster)
15:45	Coffee	
Session 10		Germano Montemezzani / FR
16:15 - 16:45	Gil Porat , Rehovot/IL	Efficient two-process frequency conversion through a dark state
16:50 - 17:20	Andon Rangelov , Sofia/BG	STIRAP applications in Lorentz force, polarization optics and wireless energy transfer
17:25 - 19:20	Posters	
19:30	Dinner	with Prof. Habakuk Tibatong "Magical physics"



FRIDAY 25.9.2015



Session 11		Barry Garraway / UK
09:15 - 09:45	Jordi Mompart , Barcelona/ES	Spatial adiabatic passage with matter waves
09:50 - 10:20	Andrew Greentree , Melbourne/AU	STIRAP in space: spatial adiabatic passage in engineered systems for transport and gates
10:25	Coffee	
Session 12		Bruce Shore / US
10:55 - 11:25	Ioannis Thanopoulos , Aigio/GR	STIRAP and coherent control: from optical control of chirality to light-driven molecular switches
11:30 - 12:00	Sir Peter Knight , London/UK	STIRAP - future perspectives
12:05	Closing	
12:15	Lunch	
13:30	departure	

FRIDAY 25.9.2015