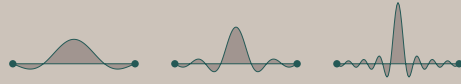


Bose-Einstein Condensation



Frontiers in Quantum Gases

BEC 2017



Program

September 2–8, 2017

Sant Feliu de Guixols, Spain

BEC
2017

Bose-Einstein Condensation 2017

Frontiers in Quantum Gases

September 2nd - 8th, 2017

ORGANIZATION

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	Hui Zhai	<i>Tsinghua University, China</i>
	Wilhelm Zwerger	<i>Technical University of Munich, Germany</i>

Local scientific organizer

Maciej Lewenstein *Institute of Photonic Sciences, Spain*

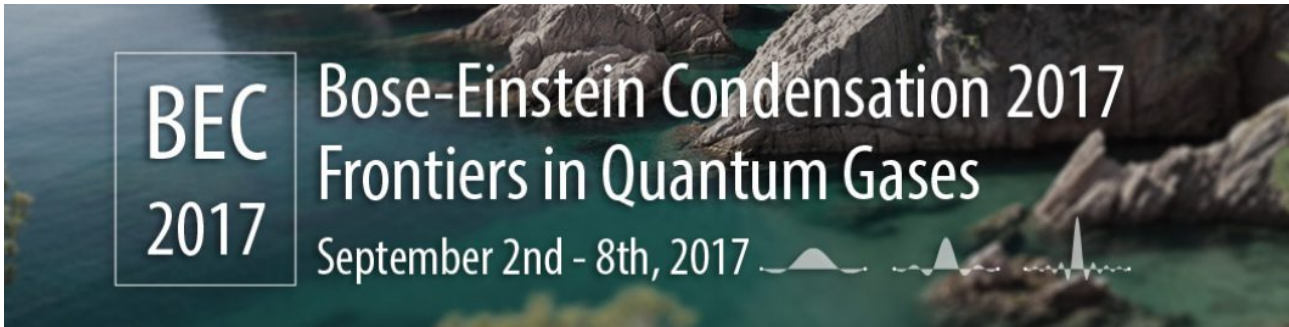
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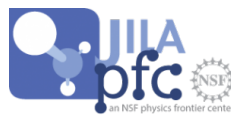
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BEC 2017 – Frontiers in Quantum Gases

September 2–8, 2017 – Sant Feliu de Guixols

Saturday 2	Sunday 3	Monday 4	Tuesday 5	Wednesday 6	Thursday 7	Friday 8
08:30 - 08:45	Conference opening	The quantum-gas legacy of Debbie Jin <i>M. Inguscio</i> W. D. Phillips E. Cornell A. M. Rey J. Ye	Fermion microscope <i>Y. Takahashi</i> M. Greiner C. Gross M. Zwerlein Coffee break	Polaritons <i>N. Proukakis</i> E. Ostrovskaya J. Bloch I. Carusotto	Hot topics <i>S. Stringari</i> W. Bakr H. Bernien P. Engels P. Treutlein	
Session	New phases of BEC A. Aspect W. Ketterle T. Esslinger L. Tarruell					
Chair						
08:45 - 09:20						
09:20 - 09:55	T. Esslinger	A. M. Rey	C. Gross	J. Bloch	H. Bernien	P. Engels
09:55 - 10:30	L. Tarruell	J. Ye	M. Zwerlein	I. Carusotto	P. Treutlein	
10:30 - 11:15	Coffee break					
Session	Polarons and connected subjects C. Kollath J. Arlt E. Demler	Impurities in quantum gases <i>J. Selim</i> M. Parish R. Grimm	Fermionic systems <i>P. Vignolo</i> C. Salomon M. Koehl Lunch	Dynamics of quantum systems <i>J. Thywissen</i> G. Roati H. Zhai	Hot topics <i>T.-L. Ho</i> J. Schmitt D. Clément S. Dürr	
Chair						
11:15 - 11:50						
11:50 - 12:25	E. Demler	R. Grimm	M. Koehl	H. Zhai	S. Dürr	
12:30 - 14:00	Lunch					
14:00 - 15:45	Free time					
Session	Gauge fields and topological bands N. Cooper I. Spielman K. Sengstock P. Törmä	Long range interactions <i>D. Stamper-Kurn</i> A. Browaeys F. Ferlaino T. Pfau	Excursion and banquet	Bell correlations <i>A. Fetter</i> C. Klempt M. Lewenstein Z.-S. Yuan Coffee break	New directions <i>G. Shlyapnikov</i> J. Steinhauer M. Schleier-Smith J. Simon	
Chair						
15:45 - 16:20						
16:20 - 16:55	K. Sengstock	F. Ferlaino		M. Lewenstein	J. Steinhauer	
16:55 - 17:30	P. Törmä	T. Pfau		Z.-S. Yuan	M. Schleier-Smith	
17:30 - 18:15	Coffee break					
18:00 - 18:15	BEC Award					
Session	Prize session C. Salomon J. Dalibard C. Chin	Thermalization and dissipation <i>J. Schmiedmayer</i> E. Altman H. Ott	Bosons: dimensionality and correlations <i>H. Perrin</i> G. Campbell Z. Hadzibabic	Pairing in fermionic systems <i>W. Zwerger</i> C. Vale R. Hulet		
Chair						
18:15 - 18:50						
18:50 - 19:25	C. Chin	H. Ott		G. Campbell	C. Vale	
19:30 - 21:00	Dinner					
21:00 - 23:00	Poster session 1					
			Poster session 2			Poster session 3
Arrival and registration			Departure			

CONFERENCE PROGRAM

September 2 (Sat)

Arrival and registration

September 3 (Sun)

Conference opening

08:30 – 08:45

September 3 (Sun)

08:45 – 10:30

Session 1: New phases of BEC

Chair: A. Aspect (Institut d'Optique Graduate School)

08:45 – 09:20 **Spin-orbit coupling and the supersolid stripe phase of Bose-Einstein condensates**
W. Ketterle (Department of Physics, MIT-Harvard Center for Ultracold Atoms)

09:20 – 09:55 **Supersolid Goldstone and Higgs modes**
T. Esslinger (ETH Zurich)

09:55 – 10:30 **Quantum droplets in attractive Bose-Bose mixtures**
L. Tarruell (ICFO – The Institute of Photonic Sciences)

Coffee

10:30 – 11:15

September 3 (Sun)

11:15 – 12:25

Session 2: Polarons and connected subjects

Chair: C. Kollath (University of Bonn)

11:15 – 11:50 **Observation of the Bose polaron and fluctuations of Bose-Einstein condensates**
J. Arlt (Institut for Fysik og Astronomi, Aarhus Universitet)

11:50 – 12:25 **Exploring magnetic polarons with cold atoms: From Kondo effect to the Fermi Hubbard model**
E. Demler (Harvard University)

Lunch

12:30 – 14:00

September 3 (Sun)

15:45 – 17:30

Session 3: Gauge fields and topological bands

Chair: N. Cooper (University of Cambridge)

15:45 – 16:20 **Chern numbers counted in a synthetic-dimension quantum Hall strip**
I. Spielman (Joint Quantum Institute: NIST and UMD)

16:20 – 16:55 **Topology and dynamics in Floquet driven optical lattices**
K. Sengstock (Universität Hamburg)

16:55 – 17:30 **Geometric origin of flat band superfluidity, and Bose-Einstein condensation in a plasmonic lattice**
P. Törmä (COMP Centre of Excellence, Aalto University)

Coffee

17:30 – 18:00

September 3 (Sun)

18:00 – 19:25

Session 4: BEC prize session

Chair: C. Salomon (École Normale Supérieure, Laboratoire Kastler Brossel)

- 18:00 – 18:05 **The Toptica company**
W. Kaenders (TOPTICA Photonics AG)
- 18:05 – 18:10 Senior prize citation
- 18:10 – 18:45 **Revisiting BKT physics with uniform gases**
J. Dalibard (Laboratoire Kastler Brossel, Collège de France, CNRS, ENS-PSL Research University, UPMC-Sorbonne Universités)
- 18:45 – 18:50 Junior prize citation
- 18:50 – 19:25 **Inflationary dynamics for Bose-Einstein condensates driven crossing a quantum critical point**
C. Chin (University of Chicago)

Dinner

19:30 – 21:00

September 4 (Mon)

September 4 (Mon)

08:30 – 10:30

Session 5: The quantum-gas legacy of Debbie Jin

Chair: M. Inguscio (University of Florence)

- 08:30 – 08:45 **Address**
W. D. Phillips (JQI-NIST and University of Maryland)
- 08:45 – 09:20 **An Efimov population: A few-body coda to a many-body opus**
E. Cornell (JILA, NIST, University of Colorado, Boulder)
- 09:20 – 09:55 **Stable ferromagnetism in a weakly interacting quantum degenerate Fermi gas: Exploring a pathway first opened by Debbie**
A. M. Rey (JILA, NIST and Department of Physics, University of Colorado, Boulder)
- 09:55 – 10:30 **The making of a polar molecule quantum gas**
J. Ye (JILA, NIST, University of Colorado, Boulder)

Coffee

10:30 – 11:15

September 4 (Mon)

11:15 – 12:25

Session 6: Impurities in quantum gases

Chair: J. Selim (Universität Heidelberg)

- 11:15 – 11:50 **Universality and dynamics of impurities in quantum gases**
M. Parish (Monash University)
- 11:50 – 12:25 **Impurities strongly interacting with a Fermi sea**
R. Grimm (IQOQI Innsbruck, Austrian Academy of Sciences)

Lunch

12:30 – 14:00

September 4 (Mon)

15:45 – 17:30

Session 7: Long range interactions

Chair: D. Stamper-Kurn (University of California, Berkeley)

- 15:45 – 16:20 **Experimental many-body physics using arrays of individual Rydberg atoms**
A. Browaeys (Laboratoire Charles Fabry, Institut d'Optique)
- 16:20 – 16:55 **Latest results on dipolar phenomena in Erbium quantum gases**
E. Ferlaino (University of Innsbruck, Institute for Quantum Optics and Quantum Information)
- 16:55 – 17:30 **Dipolar quantum gases and liquids**
T. Pfau (Physikalisches Institut and Center for Integrated Quantum Science and Technology)

Coffee

17:30 – 18:15

September 4 (Mon)

18:15 – 19:25

Session 8: Thermalization and dissipation

Chair: J. Schmiedmayer (Technische Universität Wien)

- 18:15 – 18:50 **Quantum thermalization dynamics with matrix-product states**
E. Altman (University of California Berkeley)
- 18:50 – 19:25 **Bose-Einstein condensates in imaginary potentials**
H. Ott (Department of Physics, University of Kaiserslautern)

Dinner

19:30 – 21:00

September 4 (Mon)

21:00 – 23:00

Poster session 1

September 5 (Tue)

September 5 (Tue)

08:45 – 10:30

Session 9: Fermion microscope

Chair: Y. Takahashi (Kyoto University)

- 08:45 – 09:20 **A cold-atom Fermi-Hubbard antiferromagnet**
M. Greiner (Harvard University)
- 09:20 – 09:55 **Exploring quantum magnetism at the single spin and atom level**
C. Gross (Max Planck Institute)
- 09:55 – 10:30 **Strongly correlated Fermi gases under the microscope**
M. Zwierlein (Massachusetts Institute of Technology)

Coffee

10:30 – 11:15

September 5 (Tue)

11:15 – 12:25

Session 10: Fermionic systems

Chair: P. Vignolo (Institut de Physique de Nice)

11:15 – 11:50 **Bose-Fermi dual superfluids**

C. Salomon (École Normale Supérieure, Laboratoire Kastler Brossel)

11:50 – 12:25 **Excitations and non-equilibrium physics of strongly interacting Fermi gases**

M. Koehl (University of Bonn)

Lunch

12:30 – 14:00

Excursion and banquet

14:45 Bus departure direction Dali museum in front of the hotel main entrance

16:30 – 19:00 Visit of the Dali museum in Figueres (2h30 guided tour)

18:00 Bus departure direction El Pa Volador in front of the hotel main entrance

19:00 Bus departure direction El Pa Volador from Dali museum

19:30 Banquet in restaurant El Pa Volador

September 6 (Wed)

September 6 (Wed)

08:45 – 10:30

Session 11: Polaritons

Chair: N. Proukakis (Newcastle University, Joint Quantum Centre Durham-Newcastle)

08:45 – 09:20 **Exciton-polariton condensation in non-Hermitian potentials**

E. Ostrovskaya (Nonlinear Physics Centre, Research School of Physics & Engineering, The Australian National University)

09:20 – 09:55 **Cavity polariton lattices: A non-linear photonic emulator**

J. Bloch (Centre de Nanosciences et de Nanotechnologies (C2N) CNRS, Univ. Paris-Sud, Université Paris-Saclay)

09:55 – 10:30 **Photons and atoms in synthetic magnetic fields and synthetic dimensions**

I. Carusotto (INO-CNR BEC Center and Dipartimento di Fisica, Università di Trento)

Coffee

10:30 – 11:15

September 6 (Wed)

11:15 – 12:25

Session 12: Dynamics of quantum systems

Chair: J. Thywissen (University of Toronto)

11:15 – 11:50 **Dissipative and coherent dynamics in a Josephson junction between fermionic superfluids**

G. Roati (CNR-INO, LENS, University of Florence)

11:50 – 12:25 **Two rigorous results on dynamics of quantum systems**

H. Zhai (Tsinghua University)

Lunch

12:30 – 14:00

September 6 (Wed)

15:45 – 17:30

Session 13: Bell correlations

Chair: A. Fetter (Stanford University)

15:45 – 16:20 **EPR and spatial-mode entanglement in spinor Bose-Einstein condensates**

C. Klempt (Institut für Quantenoptik, Leibniz Universität Hannover)

16:20 – 16:55 **Detecting the nonlocality of many-body quantum states**

M. Lewenstein (ICFO – Institut de Ciències Fotoniques and The Barcelona Institute of Science and Technology)

16:55 – 17:30 **Atomic spin entanglement and anyonic fractional statistics in a spin-dependent optical superlattice**

Z.-S. Yuan (University of Science and Technology of China)

Coffee

17:30 – 18:15

September 6 (Wed)

18:15 – 19:25

Session 14: Bosons: dimensionality and correlations

Chair: H. Perrin (CNRS, Paris 13 University)

18:15 – 18:50 **Studying superfluidity with ultracold atom circuits**

G. Campbell (Joint Quantum Institute, NIST and UMD)

18:50 – 19:25 **Strongly interacting bosons**

Z. Hadzibabic (University of Cambridge)

Dinner

19:30 – 21:00

September 6 (Wed)

21:00 – 23:00

Poster session 2

September 7 (Thu)

September 7 (Thu)

08:45 – 10:25

Session 15: Hot topics

Chair: S. Stringari (University of Trento)

08:45 – 09:10 **Microscopy of atomic Fermi-Hubbard systems in new regimes**

W. Bakr (Princeton University)

09:10 – 09:35 **Probing many-body dynamics on a 51-atom quantum simulator**

H. Bernien (Harvard University)

09:35 – 10:00 **Negative-mass quantum hydrodynamics with spin-orbit coupled BECs**

P. Engels (Washington State University)

10:00 – 10:25 **Bell correlations in a Bose-Einstein condensate**

P. Treutlein (University of Basel)

Coffee

10:25 – 11:10

September 7 (Thu)

11:10 – 12:25

Session 16: Hot topics

Chair: T.-L. Ho (The Ohio State University)

- 11:10 – 11:35 **Thermalized light in variable micropotentials and coupled photon condensates**
J. Schmitt (Universität Bonn)
- 11:35 – 12:00 **A single atom probe of lattice gases in momentum space**
D. Clément (Institut d'Optique Graduate School)
- 12:00 – 12:25 **A photon-photon quantum gate based on Rydberg polaritons**
S. Dürr (MPI for Quantum Optics)

Lunch

12:30 – 14:00

September 7 (Thu)

15:45 – 17:30

Session 17: New directions

Chair: G. Shlyapnikov (CNRS and CEA)

- 15:45 – 16:20 **Observation of quantum Hawking radiation and its entanglement in an analogue black hole**
J. Steinhauer (Technion)
- 16:20 – 16:55 **Scrambling quantum information in cold atoms with light**
M. Schleier-Smith (Stanford University)
- 16:55 – 17:30 **Creating materials from light: Landau levels, Mott insulators, and Laughlin puddles**
J. Simon (University of Chicago)

Coffee

17:30 – 18:15

September 7 (Thu)

18:15 – 19:25

Session 18: Pairing in fermionic systems

Chair: W. Zwerger (TU Munich)

- 18:15 – 18:50 **Excitation spectra of near-homogeneous Fermi gases**
C. Vale (Swinburne University of Technology)
- 18:50 – 19:25 **1D–3D crossover of a spin-imbalanced Fermi gas**
R. Hulet (Rice University)

Dinner

19:30 – 21:00

September 7 (Thu)

21:00 – 23:00

Poster session 3

End of the Conference

POSTER SESSIONS

Posters 1 to 24 are located in the conference room

Posters 25 to 49 are located in the Goya room

The board size is 1.5 m × 1.0 m (height × width)

September 4 (Mon)

21:00 – 23:00

Poster session 1

Ahufinger Veronica	High-efficient adiabatic transport of a Bose-Einstein condensate in coupled well potentials	1-1
Andreev Sergey	Fragmented supersolid of dipolar excitons	1-2
Baranov Mikhail	Creation and application of nanoscale optical barriers	1-3
Barberan Nuria	Few particle systems: An exact analysis of the fractional quantum Hall effect	1-4
Mazzanti Ferran	Droplets formation in trapped systems of dipolar bosons	1-5
Cabrera-Gutiérrez Citlali	Bose-Einstein condensates in a phase-modulated optical lattice	1-6
Castin Yvan	Phonon damping in a pair-condensed Fermi gas	1-7
Celi Alessio	Topological properties and many-body phases of synthetic Hofstadter strips	1-8
Chapman Michael	Quench dynamics and excitation modes of a quantum phase transition in a spin-1 BEC	1-9
Daley Andrew	Novel spin dynamics and transport with cold atoms in tilted optical lattices	1-10
Dalmonte Marcello	Many-body localization dynamics from gauge invariance	1-11
Engels Peter	Supersolid-like states in a spin-orbit coupled Bose-Einstein condensate	1-12
Fallani Leonardo	Engineering topological states of matter with ultracold two-electron atoms	1-13
Fetter Alexander	Vortex dynamics on a cylinder	1-14
Foerster Angela	Integrable quantum tunneling models in ultracold physics	1-15
Ruostekoski Janne	Giant many-body subradiant excitations in cold atomic ensembles	1-16
Gajda Mariusz	Few-body systems in a single-shot picture: Pauli crystals	1-17
García-March Miguel Á.	Open quantum dynamics of two distinguishable particles in a BEC	1-18
Gardiner Simon	Raman transfer of knotted optical vortices onto atomic Bose-Einstein condensates	1-19
Hannaford Peter	Simulating quantum spin models using ultracold Rydberg-excited ensembles in magnetic microtrap arrays	1-20
Hauke Philipp	Quantum simulation of lattice gauge theories in cold atoms	1-21
Iemini Fernando	Majorana quasi-particles protected by Z2 angular momentum conservation	1-22
Jachymski Krzysztof	Controlling the quantum fluctuations of strongly magnetic atoms	1-23
Jamison Alan	Experiments with ultracold triplet ground-state molecules	1-24
Kjærgaard Niels	Cold collision experiments at Feshbach resonances far above threshold	1-25
Lampo Aniello	Bose polaron as an instance of quantum Brownian motion	1-26
Lamporesi Giacomo	Vortex reconnections and rebounds in trapped atomic Bose-Einstein condensates	1-27
Massignan Pietro	Bose polarons at finite temperature and strong coupling	1-28
Mathey Ludwig	Detecting topological defects and implementing supersymmetric quantum mechanics	1-29
Mazza Leonardo	Laughlin-like states in bosonic and fermionic 1D gases with synthetic dimension	1-30
Naidon Pascal	Two impurities in a BEC: From Yukawa to Efimov attracted Bose polarons	1-31

Oktel Mehmet	Hofstadter butterfly evolution in the space of two-dimensional Bravais lattices	1-32
Papoular David	Entangling two non-identical atoms via Rydberg blockade	1-33
Pelster Axel	Two intriguing examples for topological effects in ultracold atoms	1-34
Rasel Ernst M.	Space-born Bose-Einstein condensation for precision interferometry	1-35
Rizzi Matteo	Exploring interacting topological insulators with ultracold atoms: The synthetic Creutz-Hubbard model	1-36
Sacha Krzysztof	Time crystals	1-37
Sagi Yoav	Many-body localization in system with a completely delocalized single-particle spectrum	1-38
Sanchez-Palencia Laurent	Superfluid-insulator transitions for strongly interacting one-dimensional bosons in a shallow periodic and disordered potentials	1-39
Sanpera Anna	Novel method to study disordered frustrated antiferromagnets in optical lattices	1-40
Santos Luis	Quantum fluctuations in low-dimensional dipolar condensates	1-41
Stringari Sandro	Angular momentum in spin-orbit coupled Bose-Einstein condensed gases	1-42
Schmiedmayer Jörg	Recurrences in an isolated quantum many-body system	1-43
Takahashi Yoshiro	Non-equilibrium dynamics of ultracold atoms in optical lattices studied with Ytterbium atoms	1-44
Vale Chris	Quantum anomaly and thermodynamics of a 2D Fermi gas via collective oscillations	1-45
van der Straten Peter	Faraday excitations in a Bose-Einstein condensate	1-46
Weitenberg Christof	Observation of a dynamical topological phase transition in the non-equilibrium dynamics of ultracold quantum gases in driven optical lattices	1-47
Zaccanti Matteo	Exploring itinerant ferromagnetism with ultracold repulsive Fermi mixtures	1-48
Zillich Robert	Dynamics of quantum many-body systems far from equilibrium: Interaction quenches	1-49
Pupillo Guido	Cavity-enhanced transport of charge	1-50

September 6 (Wed)

21:00 – 23:00

Poster session 2

Ardila Luis A. Peña	Impurities immersed in a BEC: Quantum simulator of the polaron?	2-1
Ashida Yuto	Parity-time-symmetric quantum critical phenomena	2-2
Bornheimer Ulrike	Artificial gauge fields in the honeycomb lattice	2-3
Boulier Thomas	Spontaneous avalanche dephasing in large Rydberg ensembles	2-4
Bourdel Thomas	Nonlinear scattering of atomic bright solitons in disorder	2-5
Bouyer Philippe	Ultracold atoms trapped in subwavelength potentials	2-6
Chapurin Roman	Efimov physics in resonantly interacting Bose gases	2-7
Chen Shuai	2D spin-orbit coupling for Rb BEC	2-8
Chevy Frédéric	Critical velocity of counterflowing superfluids	2-9
Chomaz Lauriane	Dipolar macro-droplet of Erbium stabilized by quantum fluctuations	2-10
Citro Roberta	Vortex lattice melting in a boson ladder in artificial gauge field	2-11
Dauphin Alexandre	Detection of Zak phases and topological invariants in a chiral quantum walk of twisted photons	2-12
Davis Matthew	Minimal model for bistability in a driven-dissipative superfluid	2-13
Fischer Uwe R.	Phase-fluctuating condensates are fragmented: An experimental benchmark for self-consistent quantum many-body calculations	2-14

Fleischhauer Michael	Topological order in finite-temperature and driven dissipative systems	2-15
Garraway Barry	RF-dressed atom wave-guides, shells and lattices for quantum technology applications: Test of Landau-Zener theory	2-16
Genkina Dina	Bulk topology of thin quantum Hall ribbons	2-17
Goldman Nathan	Probing topology by “heating”	2-18
Gordillo María Carmen	Fermionization and Mott insulator formation in few-fermion clusters in one-dimensional optical lattices	2-19
Heidrich-Meisner Fabian	Unusual transport properties of the 1D Fermi-Hubbard model	2-20
Inoue Ryotaro	Noncooled site-resolved imaging of a Mott insulator	2-21
Jiménez García Karina	One-dimensional spinor Bose gases: Magnetic order and non-equilibrium dynamics	2-22
Kokkelmans Servaas	Three-body physics with finite-range potentials	2-23
Lev Benjamin	Breaking integrability in a dipolar quantum Newton’s cradle	2-24
Levinsen Jesper	Bose polarons	2-25
Modugno Michele	Simulating condensed matter with ultracold atoms: The Haldane model and the Peierls substitution	2-27
Mompart Jordi	Dynamics of orbital angular momentum states of ultracold atoms in ring potentials	2-28
Olshanii Maxim	Quantum Galilean cannon as a Schrödinger cat	2-29
Perrin H�el�ene	Probing superfluidity in a quasi two-dimensional Bose gas through its local dynamics	2-30
Poletti Dario	Energy transport in bosonic ladders: Interplay between interactions, gauge field and geometry of system-bath coupling	2-31
Preiss Philipp	Quantum simulation of mesoscopic Fermi systems	2-32
Robins Nick	A precision quantum sensor based on free falling Bose-Einstein condensates	2-33
Roscilde Tommaso	Studying quantum criticality with quantum observables in cold-atom experiments	2-34
Schmiedmayer J�org	Experimental characterization of a quantum many-body system via higher-order correlations	2-35
Schneider Ulrich	An optical quasicrystal for ultracold atoms	2-36
Semeghini Giulia	Quantum liquid droplets in a Bose-Bose mixture of ultracold atoms	2-37
Sheikhan Ameneh	Cavity-induced generation of non-trivial topological states in quasi-one-dimensional and two-dimensional Fermi gas	2-38
Shlyapnikov Georgy	Two-dimensional finite-temperature bosonic atoms in disorder	2-39
Thywissen Joseph	AC conductivity measurement of ultracold fermions in an optical lattice	2-40
Uchino Shun	Anomalous transport in attractively interacting Fermi gases	2-41
van Druten Klaasjan	Rydberg excitation and Rydberg dressing of ultracold gases on an atom chip	2-42
Vernac Laurent	Mean field and beyond mean field spin mixing dynamics in Chromium quantum gases	2-43
Werner F�elix	Controlled summation of diagrammatic series for the unitary Fermi gas: Bold diagrammatic Monte Carlo, large-order asymptotics and conformal-Borel transformation	2-44
Yamamoto Ryuta	A quantum gas microscope of two-electron atoms with fluorescence and Faraday imaging	2-45
Zakrzewski Jakub	Many-body localization transition for bosons in optical lattice	2-46
Zwerger Wilhelm	Deep inelastic scattering on ultracold atoms	2-47

Poster session 3

Astrakharchik Grigory	Ultradilute low-dimensional liquids	3-1
Brand Joachim	Dark solitons and vortices in confined superfluids	3-2
Brantut Jean-Philippe	Quantum coherent transport of cold fermions in mesoscopic structures	3-3
Bruun Georg	Induced interactions and topological phases in Fermi-Bose mixtures	3-4
Busch Thomas	Creating and controlling superfluid vortex rings in artificial magnetic fields	3-5
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