Invited Talks

Prof. Dr. Immanuel Bloch
Max Planck Institute of Quantum Optics
& Ludwig-Maximilians-Universität München

Summary

370 invited international talks and **166** further invited talks in Germany (**536** total).

Invited International Talks

370. **Distinguished Physics Colloquium, University of Luxembourg**, 14 October 2026, Luxembourg (Luxembourg)
From the Pseudogap in the Fermi Hubbard model to Quantum Spin Liquids: Probing Correlated Quantum Matter with Ultracold Atoms

369. **Alessandro Volta Prize Symposium**, 2 October 2026, Como (Italy)
A New Era of Quantum Simulation with Ultracold Atoms

368. **BeyondC Conference**, 21-25 September 2026, Vienna (Austria)
A New Era of Quantum Simulation with Ultracold Atoms

367. **Photonics Novelty Conference**, 15-17 September 2026, Technion, Haifa (Israel)
Quantum Simulation with Ultracold Atoms in Optical Lattices

366. **DigiQ School**, 30 June – 1 July 2026, École Normale Supérieure, Paris (France)
Analog and Digital Quantum Simulation with Ultracold Atoms

365. **AMO Symposium**, 22 June 2026, Weizmann Institute of Science, Rehovot (Israel)
Quantum Simulation with Ultracold Atoms in Optical Lattices

364. **Quantum Connections School**, 11-12 June 2026, Högberga Gård (Sweden)
Analog and Digital Quantum Simulation with Ultracold Atoms

363. **DAMOP 2026 - Invited Talk**, Providence (USA), 4 June 2026
Quantum Simulation with Ultracold Atoms in Optical Lattices

362. **CUA Colloquium Harvard/MIT**, Cambridge (USA), 12 May 2026
From Quantum Spin Liquids, to Pseudogap and Stripes: Probing Correlated Quantum Matter with Ultracold Atoms

361. **Quantum Matter 2026 – Plenary Talk**, Barcelona (Spain), 28 April 2026
Quantum Simulation with Ultracold Fermions

360. **NEQSUM26 – Keynote Talk (virtual participation)**, Erice (Italy), 17 April 2026
Quantum Simulation with Ultracold Fermions in Optical Lattices

359. **CalBay School – Lecture**, Stanford (USA), 23-26 March 2026
Quantum Simulation with Ultracold Fermions in Optical Lattices

358. **APS Global Summit – Invited Talk**, Denver (USA), 17-20 March 2026
Quantum Simulation with Ultracold Fermions in Optical Lattices

357. **TU Delft - Colloquium**, Delft (Netherlands), 4 March 2026
Quantum Simulation and Quantum Computing with Ultracold Atoms in Optical Lattices

356. **Quantum Optics 2026**, Obergurgl (Austria), 23–26 February 2026
Quantum Simulation with Ultracold Atoms in Optical Lattices

355. **Fermi Legacy in Low Energy Physics – Invited Talk**, Accademia dei Lincei, Rome (Italy), 5–6 February 2026
Quantum Simulation with Ultracold Fermions in Optical Lattices

354. **Nanometa 2026 – Plenary Talk**, Seefeld (Austria), 6–9 January 2026
Quantum Simulations with Atoms and Photons

353. **Summit of Quantum Frontiers**, Hong Kong (China), 15–18 December 2025
Quantum Simulation with Atoms and Molecules

352. **Frontiers of Programmable Quantum Dynamics**, KITP, Santa Barbara (USA), 27–30 October 2025
Quantum dynamics using ultracold atoms: from fluctuation hydrodynamics, anomalous spin transport to Loschmidt echoes

351. **Micius Salon**, Shanghai (China), 26 September 2025
Realizing Richard Feynman's Dream of a Quantum Simulator

350. **ICEQT 2025**, Hefei (China), 19 September 2025
Quantum Simulation with Ultracold Atoms and Molecules

349. **Entangle This**, Madrid (Spain), 16 September 2025
Quantum Simulation and Quantum Computing with Fermions

348. **Taming Light and Matter**, Zurich (Switzerland), 29 August 2025
From Shared Foundations to New Frontiers: Exploring the Quantum World with Tilman 1

347. **Summer School: Exact Solvability and Quantum Information**, Les Houches (France), 21–26 August 2025
Analog Quantum Simulation using Ultracold Atoms

346. **Frontiers of Cold Atoms Physics**, Milan (Italy), 17 July 2025
Quantum Simulation and Quantum Computing with Fermions

345. **Physics Colloquium – University of Toulouse**, Toulouse (France), 4 June 2025
Quantum Simulation and Quantum Computing with Fermions

344. **QuantuMatter 2025 – Keynote Talk**, Grenoble (France), 22 May 2025
Quantum Simulation and Quantum Computing with Fermions

343. **Collège de France**, Paris (France), 21 May 2025
Quantum Simulation and Quantum Computing with Fermions

342. **CQT–MCQST–IMPRS School**, Singapore, 13 May 2025
Quantum Simulation and Quantum Computing with Fermions

341. **MECO 50**, Dubrovnik (Croatia), 25 March 2025
Quantum Simulation In- and Out-of- Equilibrium with Ultracold Atoms

340. **Candela BEC Lecture**, Zoom Presentation, 19 March 2025
Quantum Simulation and Quantum Computing with Fermions

339. **TII Quantum Technology Symposium**, Abu Dhabi (UAE), 28 January 2025
Quantum Simulation and Quantum Computing with Fermions

338. **QM100 - International Center for Theoretical Sciences**, Bengaluru (India), 16 January 2025
Quantum Simulation and Quantum Computing with Fermions

337. **Many-body Quantum Optics - Kavli Institute for Theoretical Physics (KITP)**, Santa Barbara (USA), 16 December 2024
Quantum Optics and Many-Body Physics with Ultracold Atoms in Optical Lattices

336. **National Academy of Science Meeting on Frontiers of Engineered Coherent Matter and Systems**, Washington (USA), 3 October 2024
Quantum Simulation In- and Out-of-Equilibrium using Ultracold Atoms

335. **Pontifical Academy of Science**, Biennial Plenary Meeting, Casino Pio IV (Vatican City), 23-25 September 2024
Exploring the Quantum World through Quantum Simulation

334. **IQOQI 20 Years Celebration**, Innsbruck (Austria), 16-20 September 2024
New Avenues for Quantum Simulation with Atoms and Molecules

333. **Pujiang Innovation Forum (virtual participation)**, Shanghai (China), 7-10 September 2024
New Avenues for Quantum Simulation with Atoms and Molecules

332. **QSIM 2024**, Rhode Island (USA), 12-16 August 2024
New Avenues for Quantum Simulation with Atoms and Molecules

331. **Center for Quantum Technologies (CQT)**, Singapore, 31 July 2024
Quantum Simulation with Atoms, Molecules and Photons

330. **OPTICA**, Plenary Talk, Rotterdam (Netherlands), 24 June 2024
Quantum Simulation with Atoms, Molecules and Photons

329. **BIG Ideas Workshop**, San Sebastian (Spain), 27-31 May 2024
Quantum Simulation with Atoms and Photons

328. **85th Workshop:Nonequilibrium Phenomena in Strongly Correlated Ultracold Matter**, Erice (Italy), 9-15 May 2024
From Pseudogap & Stripes to Non-Equilibrium Quantum Dynamics

327. **Zurich Physik Colloquium**, Zurich (Switzerland), 8 May 2024
Quantum Simulation with Ultracold Atoms, Molecules and Photons

326. **Condensed Matter Seminar ETH Zurich**, Zurich (Switzerland), 7 May 2024
From Pseudogap & Stripes to Non-Equilibrium Quantum Dynamics

325. **Collège de France Physics Colloquium**, Paris (France), 25 April 2024
Quantum Simulation with Ultracold Atoms, Molecules and Photons

324. **Niels Bohr Lecture & QuantumHub Colloquium**, Copenhagen (Denmark), 10 April 2024
Quantum Simulation with Ultracold Atoms, Molecules and Photons

323. **APS March Meeting**, Invited Talk, Minneapolis (USA), 8 March 2024
Hole Pairing, Emergence of Stripes and Pseudogap in the Doped 2D Fermi Hubbard Model

322. **The Magic of Disorder and Correlations**, Geneva (Switzerland), 17-19 January 2024
New avenues for quantum simulation with atoms, molecules and photons

321. **IBM QISKIT Quantum Seminar**, Youtube Live Stream, 15 December 2023
Quantum Simulation with Ultracold Atoms in Optical Lattices

320. **POSTECH Signature International Conference on Prospective Quantum Technology: Science and Applications**, Pohang (South Korea), 1- 3 November 2023
New Avenues for Quantum Simulation with Ultracold Atoms, Molecules and Photons

319. **Quantum Colloquium**, Cambridge (UK), 26 October 2023
New Avenues for Quantum Simulation with Ultracold Atoms, Molecules and Photons

318. **Future Science Prize Week**, Hongkong SAR (China), 15 October 2023
Quantum Simulations using Ultracold Atoms Molecules and Photons

317. **GRC Quantum Control of Light and Matter**, Newport (USA), 6-11 August 2023
Quantum Simulation using Atoms, Photons and Molecules

316. **Boulder Summer School: Non-Equilibrium Quantum Dynamics**, Boulder (USA), 3-28 July 2023
Quantum Simulation using Ultracold Atoms

315. **Precision Many-Body Physics Workshop**, Collège de France, Paris (France), 12-14 June 2023
Probing equilibrium and non-equilibrium dynamics of the Hubbard model with ultracold atoms: non-local correlations and full counting statistics

314. **Racah Lecture**, The Hebrew University of Jerusalem (Israel), 5 June 2023
New Avenues for Quantum Simulation with Atoms, Molecules and Photons

313. **Topology and Physics on Mount Carmel - Zak Fest**, Technion Haifa (Israel), 15-18 May 2023
Probing Topology and Non-Equilibrium Dynamics Using Ultracold Atoms

312. **Princeton Physics Colloquium**, Princeton (USA), 13 April 2023
New Avenues for Quantum Simulation with Atoms, Molecules and Photons

311. **IMPRS QST Berkeley-Munich Winter School**, Berkeley (USA), 8 January 2023
Quantum Simulation and Quantum Computing using Ultracold Atoms

310. **Physics Colloquium – Weizmann Institute of Science**, Rehovot (Israel), 6 December 2022
Large Scale Quantum Simulations using Ultracold Atoms in Optical Lattices

309. **Sorbonne Physics Colloquium**, Paris (France), 30 November 2022
Quantum Simulations using Ultracold Atoms in Opitcal Lattices

308. **University of Birmingham Physics Colloquium**, Birmingham (UK), 23 November 2022
Large Scale Quantum Simulations using Ultracold Atoms in Optical Lattices

307. **Wave Localisation, Many-body Localisation, and Quantum Information**, Cargèse (France), 24-27 October 2022
Quantum Simulation using Ultracold Atoms in Opitcal Lattices & Experimental Probes of Many-Body Localisation using Ultracold Atoms

306. **Lise Meitner Distinguished Lecture**, AlbaNova Stockholm (Sweden), 22 September 2022
Large Scale Quantum Simulations using Ultracold Atoms in Optical Lattices

305. **DYNISQ22 Program**, KITP Santa Barbara (USA), 2 September 2022
Exploring Non-Equilibrium Dynamics using Ultracold Atoms in Optical Lattices

304. **Nobel Symposium on Emerging Quantum Technologies**, Malmö (Sweden), 25-28 August 2022
Large Scale Quantum Simulations using Ultracold Atoms in Optical Lattices

303. **Quantum Interactive Dynamics**, Oxford University (UK), 23 June 2022
Probing Non-Equilibrium Dynamics and KPZ Universality using Ultracold Atomic Quantum Simulations

302. **Open System Control of Atomic and Photonic Matter**, Physikzentrum Bad Honnef (Germany),14 June 2022
Subwavelength Arrays of Quantum Emitters as Novel Light Matter Interfaces

301. **Mathematical Results in Quantum Many-Body Systems**, Herrsching (Germany), 9 June 2022
Probing Quantum Matter In- and Out-of-Equilibrium Using Quantum Gas Microscopes

300. **DAMOP Meeting 2022**, Orlando (USA), 30.5.-3.6.2022
A Single Rydberg Atom Controlled Optical Mirror formed by Subwavelength Arrays of Atoms

299. **EU Cluster Review Meeting (PASQuanS)**, Paris (France), 13 May 2022
Programmable Atomic Large Scale Quantum Simulations

298. **QFARM Seminar (Stanford University)**, Stanford (USA), 4 May 2022
From Kardar-Parisi-Zhang Superdiffusion in Heisenberg Quantum Magnets to Novel Quantum Optical Light Matter Interfaces with Subwavelength Atomic Arrays

297. **Stanford Physics Colloquium**, Stanford (USA), 3 May 2022
Quantum Matter under the Microscope - Engineering and Probing Quantum Matter using Quantum Simulations

296. **The European Spring School on Quantum Science and Technology**, Strasbourg (France), Invited Lectures, 11-12 April 2022
Large Scale Quantum Simulations using Ultracold Quantum Gases in Optical Lattices

295. **APS March Meeting 2022**, Chicago (USA), Invited talk (virtual), 14-18 March 2022
From Polaronic Metals to Hole Pairing - Exploring Fermi-Hubbard Systems using Quantum Gas Microscopy

294. **European Quantum Technologies Conference**, Dublin (virtual), Keynote talk, 29 November-2 December 2021
Quantum Simulations

293. **ESI Workshop Topology, Disorder, and Hydrodynamics in Non-equilibrium Quantum Matter**, Vienna (virtual), 29 November 2021
Probing Kardar-Parisi-Zhang Universality in Heisenberg Quantum Magnets

292. **NIST Grand Challenges in QST**, NIST (virtual), 22 November 2021
Quantum Simulations

291. **1st International Symposium in Trans Scale Quantum Science**, Tokyo (virtual), 25-29 October 2021
Probing Quantum Matter In- and Out-Of-Equilibrium on a Large Scale Atomic Quantum Simulator

290. **Bose-Einstein-Condensation 2021**, San Feliu de Guixols, 13-17 September 2021
Probing Kardar-Parisi-Zhang Universality in Heisenberg Quantum Magnets

289. **HKUST IAS Center for Quantum Technologies Inaugural Workshop**, Hong-Kong, Videoconference talk, 26 August 2021
Probing Quantum Matter In and Out of Equilibrium on a Large-Scale Atomic Quantum Simulator

288. **Chilloquium: Harvard Students Colloquium Cambridge**, Videoconference lecture 16 August 2021
Large Scale Quantum Simulations using Ultracold Atoms

287. **Boulder Summer School for Condensed Matter and Material Physics**, Boulder, Videoconference lecture series, 26-28 July 2021
Experimental Probes of Many-Body Localization Experiments and Non-Equilibrium dynamics

286. **VI International Conference on Quantum Technologies (ICQT) - Digital Edition**, Moscow, Videoconference talk, 15 July 2021
Probing Quantum Matter In and Out of Equilibrium on a Large-Scale Atomic Quantum Simulator

285. **ICTS Online School on Trapped Atoms, Molecules and Ions**, Bangalore (India), Videoconference lectures, 18-19 May 2021
Quantum Simulation

284. **Janet Das Sarma Colloquium Series QUANTUM**, Videoconference, 17 May 2021
Realizing and Probing Quantum Matter using Large Scale Quantum Simulations

283. **Cornell University Physics Colloquium**, Videoconference 3 May 2021
Engineering and Probing Quantum Matter using Large Scale Quantum Simulations

282. **ICFO/IMPRS QST Summer School**, Videoconference 24. March 2021
Engineering and Probing Quantum Matter using Quantum Simulations

281. **Tel Aviv University - Center for Quantum Science and Technology Seminar**, Videoconference, 16 March 2021
Engineering and Probing Quantum Matter using Quantum Simulations

280. **Israel Quantum Meetup**, Videoconference, 18 January 2021
Quantum Simulation and Quantum Computing

279. **Workshop on Quantum Simulation**, Tze'elim (Israel) 23-26 February 2020
Engineered Ultracold Quantum Matter - From Quantum Simulations to Novel Quantum Light-Atom Interfaces

278. **Universidad Autonoma de Barcelona (UAB) Physics Colloquium**, Barcelona (Spain), 19 February 2020
Quantum Matter under the Microscope

277. **Harvard Quantum Optics Seminar**, Harvard University (USA), 5 February 2020
From Non-Equilibrium Topological Matter to Rydberg Macrodimers

276. **Harvard Physics Colloquium**, Harvard University (USA), 3 February 2020
Engineered Ultracold Quantum Matter - From Quantum Simulations to Novel Quantum Light-Atom Interfaces

275. **Ultra-Quantum Matter (UQM) Meeting – Simons Foundation**, New York (USA), 23-24 January 2020
Quantum Matter Under the Microscope

274. **Japan-EU-US Symposium on Quantum Technologies**, Kyoto (Japan), 16-17 December 2019
Quantum Simulations using Ultracold Atoms and Ions

273. **Quantum Simulations in Optical Lattices and Beyond**, Shanghai (China), 13-14 December 2019
Exploring Quantum Matter Using Ultracold Atoms

272. **Chalmers University - Light at the Nanoscale: From Molecules to Quantum Computers**, Gothenburg (Sweden), 5-6 December 2019
Quantum Matter under the Microscope

271. **APS Ridge Colloquium**, Ridge (USA), 21 November 2019
Large Scale Quantum Simulations Using Ultracold Atoms

270. **Stony Brook – Physics Colloquium**, Stony Brook (USA), 20 November 2019
Large Scale Quantum Simulations Using Ultracold Atoms

269. **Flatiron Institute – Workshop on Nonequilibrium Quantum Matter**, New York (USA), 19 November 2019
Exploring Quantum Matter using Ultracold Atoms

268. **Ernest Kempton Adams Lecture – Columbia University**, New York (USA), 18 November 2019
Quantum Many-Body Dynamics under the Microscope

267. **Open Questions in Quantum Physics: Information, Computation and Foundations**, ESTEC, Leiden (Netherlands), 15 November 2019
Large Scale Quantum Simulations Using Ultracold Atoms

266. **Ordering and Dynamics of Correlated Quantum Systems**, Évero (Portugal) 21-25 October 2019
Fermi Hubbard Model under the Quantum Gas Microscope

265. **Les Houches Summer School - Dynamics and Disorder in Quantum Many Body Systems Far From Equilibrium**, Les Houches (France), 17 July – 23 August 2019
Nonequilibrium Dynamics with Ultracold Atoms

264. **Designing Quantum Matter**, San Sebastian (Spain), 16-18 July 2019
From Dynamical Spin Charge Deconfinement to Rydberg Macrodimers

263. **Quantum Connections - Summer School**, Stockholm (Sweden), 17-20 June 2019
Large Scale Quantum Simulations Using Ultracold Atoms in Optical Lattices

262. **GRC Atomic Physics**, Newport Rhode Island (USA), 9-12 June 2019
From Dynamical Spin Charge Deconfinement to Rydberg Macrodimers

261. **New Trends in Quantum Complex Systems**, Venice (Italy), 8-11 April 2019
Quantum Simulations using Ultracold Atoms

260. **Quantum Information and Measurement (QIM) V: Quantum Technologies**, Plenary Talk, Rome (Italy), 4-6 April 2019
Quantum Simulations using Ultracold Atoms

259. **Quantum Information: The Second Quantum Revolution?**, Brussels (Belgium), 30 March 2019
Quantum Simulations of Condensed Matter Systems

258. **ITAMP Winterschool on Quantum Many-Body Systems**, Biosphere 2, Tucson (USA), 10-16 March 2019
Probing Nonequilibrium Dynamics Using Ultracold Atoms

257. **Quantum Seminar**, Yale Quantum Institute (YQI), New Haven (USA), 26 February 2019
From Topology to Many-Body Localization using Ultracold Atoms

256. **Hanan Rosenthal Lecture**, Yale University, New Haven (USA), 25 February 2019
Realizing Richard Feynman's Dream of a Quantum Simulator

255. **Solvay Workshop on Quantum Simulation**, Brussels (Belgium), 18-20 February 2019
Controlling and Exploring Quantum Matter using Ultracold Atoms

254. **SFB FoQuS Symposium**, Innsbruck (Austria), 8 February 2019
Controlling and Exploring Quantum Matter using Ultracold Atoms

253. **Nonequilibrium and transport in many-body systems**, Weizmann Institute of Science, Rehovot (Israel), 20-24 January 2019
Proning Nonequilibrium Dynamics Using Ultracold Atoms

252. **Colloquium CERN**, Geneva (Switzerland), 9 November 2018
Realizing Richard Feynman's Dream of a Quantum Simulator

251. **Colloquium IST Austria**, Vienna (Austria), 29 October 2018
Realizing Richard Feynman's Dream of a Quantum Simulator

250. **Scott Lectures – Cambridge University**, Cambridge (UK), 22 October-26 October 2018
Three part lecture series

249. **Colloquium – Instituto Fisica Teorica**, Madrid (Spain), 18 October 2018
Exploring Quantum Matter Using Ultracold Atoms in Optical Lattices

248. **Paco Yndurain Lecture – Universidad Autonoma de Madrid**, Madrid (Spain), 17 October 2018
Realizing Richard Feynman's Dream of a Quantum Simulator

247. **Physics Colloquium – Weizmann Institute of Science**, Rehovot (Israel), 11 October 2018
Probing and Exploring Quantum Matter Using Ultracold Atoms in Optical Lattices

246. **ICTP Summer School "Collective Behaviour in Quantum Matter"**, Trieste (Italy), 5-6 September 2018
Introduction to Ultracold Atoms in Optical Lattices

245. **GRC Quantum Science**, Easton (USA), 29 July – 2 August 2018
Large Scale Quantum Simulations Using Ultracold Atoms in Optical Lattices

244. **ICAP 2018**, Barcelona (Spain), 23-27 July 2018
Probing Topological Order and Hidden Magnetism in Ultracold Quantum Gases

243. **CLEO – Invited Lecture**, San Jose (USA), 14-17 May 2018
Large Scale Quantum Simulations Using Ultracold Atoms in Optical Lattices

242. **Symposium on Quantum Science and Engineering**, Technion, Haifa (Israel), 7-8 May 2018
Large Scale Quantum Simulations Using Ultracold Atoms in Optical Lattices

241. **Statistical Mechanics Out Of Equilibrium**, Princeton (USA), 30 April – 2 May, 2018
Probing Many-Body Localization using Ultracold Quantum Gases

240. **Nonthermal Quantum Systems**, Boston (USA), 11-15 March 2018
Probing Many-Body Localization using Ultracold Quantum Gases

239. **APS March Meeting – Invited Talk**, Los Angeles (USA), 8 March 2018
Probing Many-Body Localization using Ultracold Quantum Gases

238. **Boltzmann Lecture**, SISSA, Trieste (Italy), 20 February 2018
Probing the Frontiers of Statistical Physics Using Ultracold Atoms

237. **Quantum Simulation & Computation**, Bilbao (Spain), 12-16 February 2018
Large Scale Quantum Simulations Using Ultracold Atoms

236. **Summer School on Topological Matter**, ANU, Canberra (Australia), 15-18 January, 2018
Realising and Probing Topology Using Ultracold Atoms in Optical Lattices

235. **Rutgers University**, Physics Colloquium, New Brunswick (USA), 6 December, 2017
Large Scale Quantum Simulations Using Ultracold Atoms

234. **International Conference on Quantum Simulations**, Paris (France), 13-17 November 2017
Large Scale Quantum Simulations Using Ultracold Atoms

233. **The Second Quantum Revolution – Symposium honouring Alain Aspect**, Berlin (Germany), 10 November 2017
From Order to Disorder in Ultracold Quantum Gases

232. **Physics on Friday Colloquium**, Pisa (Italy), 3 November 2017
Probing and Controlling Quantum Matter using Ultracold Atoms in Optical Lattices

231. **Onassis Lectures on Quantum physics frontiers explored with cold atoms, molecules and photons**, Heraklion (Greece), 24-27 July 2017
Controlling and Exploring Quantum Matter using Ultracold Atoms in Optical Lattices

230. **Conference on Many-Body-Localization @ ICTP**, Trieste (Italy), 10-14 July 2017
Probing Many-Body Localization from an Ultracold Atom Perspective

229. **Frontiers in Emergent Quantum Phenomena @ NYU**, New York (USA), 28-30 June 2017
Large Scale Quantum Simulations Using Ultracold Atoms in Optical Lattices

228. **Blackboard Seminar @ KITP**, Santa Barbara (USA), 10 October 2016
Controlling and Exploring Quantum Matter Using Ultracold Atoms in Optical Lattices

227. **Public Lecture @ KITP**, Santa Barbara (USA), 29 September 2016
Realizing Richard Feynman's Dream of a Quantum Simulator

226. **Workshop on Many-body Dynamics and Open Quantum Systems (DOQS) 2016**, Glasgow (UK), 30 August – 2 September 2016
Fermionic Quantum Gas Microscopes and MBL with Ultracold Atoms

225. **European Science Open Forum (ESOF) 2016**, Manchester (UK), 25 July 2016
Realizing Richard Feynman's Dream of a Quantum Simulator

224. **Les Houches Summer School – Current Trends in Atomic Physics**, Les Houches (France), 15-19 July 2016
Probing and Controlling Quantum Matter in Optical Lattices

223. **Quantum Matter Workshop**, Benasque (Spain), 29 June – 3 July 2016
Many-Body Localization from an Experimental Ultracold Atom Perspective

222. **Varenna Sumer School – Quantum Simulations**, Varenna (Italy), 21-23 June 2016
Probing and Controlling Quantum Matter in Optical Lattices

221. **Itzykson Conference on Dynamics & Disorder**, IPhT CEA-Saclay (France), 13-15 June 2016
Many-Body Localization from an Experimental Ultracold Atom Perspective

220. **Quantum Science, Matter & Engineering Symposium**, Technion, Haifa (Israel), 1-2 June 2016
Probing and Controlling Non-Equilibrium Dynamics using Ultracold Atoms

219. **Bar Ilan University - Physics Colloquium**, Ramat Gan (Israel), 30 May 2016
Probing and Controlling Non-Equilibrium Dynamics using Ultracold Atoms

218. **APS March Meeting Focus Session – Recent Advances in Many-Body Localization**, Baltimore (USA), 18 March 2016
Many-body localization of interacting fermions in quasi-random optical lattices

217. **Gordon Research Conference – Ultrafast Phenomena in Cooperative Systems**, Il Ciocco (Italy)m 17-19 February 2016
Probing and Controlling Non-Equilibrium Dynamics using Ultracold Atoms

216. **Solvay Workshop**, UBL Brussels (Belgium), 9-11 February 2016
Many-Body Localization from an Experimental Ultracold Atom Perspective

215. **Israeli Physical Society Meeting – Keynote Talk**, Bar Ilan University (Israel), 13 December 2015
Probing and Controlling Quantum Matter at the Single Atom Level

214. **Program on Many-Body Localization – Invited Seminar**, KITP (USA), 2 December 2015
Probing Many-Body Localization Using Ultracold Atoms

213. **Alba Nova and Nordita – Physics Colloquium**, AlbaNova University Center, Stockholm Center for Physics, Astronomy and Biotechnology (Sweden), 26 November 2015
Probing and Controlling Quantum Matter at the Single Atom Level

212. **University of Maryland – Physics Colloquium**, University of Maryland (USA), 3 November 2015
Probing and Controlling Quantum Matter at the Single Atom Level

211. **Joint Quantum Institute (JQI) – Seminar**, Maryland (USA), 2 November 2015
From Many-Body Localization to Topology – New Frontiers for Ultracold Quantum Gases

210. **Bose-Einstein Condensation 2015 – Frontiers in Quantum Gases**, Sant Feliu du Guixols (Spain), 5-11 September 2015
From Many-Body Localisation to Thouless Quantum Pumps - New Frontiers for Ultracold Quantum Gases

209. **Workshop on Interacting Fermions: Precision Theory and Experiment**, Trieste (Italy), 6-10 July 2015
From Many-Body Localization to Long-Range Interacting Rydberg Gases - New Frontiers for Ultracold Quantum Gases

208. **22nd International Conference on Laser Spectroscopy**, Singapore, 28 June - 3 July 2015
From Many-Body Localization to Novel Rydberg Quantum Magnets - New Frontiers for Ultracold Quantum Gases

207. **Quantum Frontiers Distinguished Lecture**, Waterloo (Canada), 24 June 2015
From Topological Bloch Bands to Long-Range Interacting Rydberg Gases - New Frontiers for Ultracold Atoms

206. **University of Strathclyde**, Department of Physics, Optics Division seminars, Glasgow (UK), 1 June 2015
Probing and Controlling Ultracold Quantum Gases – from Single Atoms to Rydberg Dressing

205. **CLEO: 2015 - Laser Science to Photonic Applications**, San Jose (USA), 10-15 May 2015
Probing and Controlling Quantum Matter in Crystals of Light

204. **Topological and Strongly Correlated Phases in Cold Atoms**, Princeton (USA), 30 April - 1 May 2015
From Many-Body Localization to Novel Quantum Magnets: New Frontiers for Ultracold Gases

203. **Physics Colloquium – Caltech**, Pasadena (USA), 12 February 2015
Controlling and Exploring Quantum Matter at the Single Atom Level

202. **Physics Colloquium – Oxford University**, Oxford (UK), 6 February 2015
Probing and Controlling Quantum Matter in Artificial Crystals of Light

201. **Fundamental physics with Light & Atoms**, Turin (Italy), 27 January 2015
From topological Bloch bands to quantum magnetism with Rydberg atoms - New perspectives for ultracold gases

200. **Academia de Lincei – Challenges in Crystallography**, Rome (Italy), 13-14 October 2014
Probing and Controlling Quantum Matter in Artificial Crystals of Light

199. **Okinawa School in Physics – 3 Lectures**, Okinawa (Japan), 15-18 September 2014
Probing and Controlling Quantum Matter in Optical Lattices

198. **Erwin Schrödinger Institut – Topological Phases of Matter**, Vienna (Austria), 11 September 2014
Realizing and Controlling Topological Bloch Bands in Optical Lattices

197. **Aspen Center for Physics – Colloquium**, Aspen (USA), 4 September 2014
Controlling and Exploring Quantum Matter at the Single Atom Level

196. **Gordon Research Conference on Quantum Science**, Easton (USA), 27-31 July 2014
Probing and Controlling Topological Bloch Bands

195. **Enrico Fermi Summer School on Cold Quantum Gases**, Varenna (Italy), 7-17 July 2014

194. **Non-Equilibrium Phenomena in Condensed Matter and String Theory – ICTP**, Trieste (Italy), 30 June – 2 July 2014
Probing Non-Equilibrium Quantum Dynamics at the Single Atom Level

193. **Quantum Matter Workshop – Benasque Physics Center**, Benasque (Spain), 16-27 June 2014
From Topological Bloch Bands to Long Range Interacting Rydberg Atoms

192. **Dynamics and Transport in Quantum Matter – Technion**, Haifa (Israel), 6-10 June 2014
From Topological Bloch Bands to Long Range Interacting Rydberg Atoms

191. **BEC 2014 Workshop**, Levico (Italy), 29 May 2014
Engineering and Probing Topological Bloch Bands in Optical Lattices

190. **PLANCKS Symposium – Beatrix Theatre Utrecht**, Utrecht (Netherlands), 23 May 2014

189. **Collège de France Colloquium – Collège de France**, Paris (France), 14 May 2014
Engineering and Probing Topological Bloch Bands in Optical Lattices

188. **Milan Physics Colloquium – Milan University**, Milan (Italy), 15 April 2014
Controlling and Exploring Quantum Matter at the Single Atom Level

187. **Condensed Matter Physics Seminar – Harvard University**, Cambridge (USA), 10 April 2014
From Topological Bloch Bands to Long-Range Interacting Rydberg Crystals

186. **Vernon Hughes Memorial Lecture – Yale University**, New Haven (USA), 24 March 2014
Controlling and Exploring Quantum Matter at the Single Atom Level

185. **Workshop on New Perspectives on Thermalization - Aspen Physics Center**, Aspen (USA), 17-21 March 2014
Probing Non-Equilibrium Quantum Dynamics at the Single Atom Level

184. **Frontiers in the Quantum World Symposium**, Florence (Italy), 10 March 2014
From Laser Assisted Tunneling to Rydberg Crystals

183. **Einstein Colloquium – Weizmann Institute of Science**, Rehovot (Israel), 23 January 2014
Controlling and Exploring Quantum Matter at the Single Atom Level

182. **Physics Colloquium – University of Basel**, Basel (Switzerland), 22 November 2013
Controlling and Exploring Quantum Matter at the Single Atom Level

181. **Physics Colloquium@ MIT**, Cambridge (USA), 14 November 2013
Controlling and Exploring Quantum Matter at the Single Atom Level

180. **Innsbruck Physics Lecture**, Innsbruck (Austria), 22 October 2013
Controlling and Exploring Quantum Matter at the Single Atom Level

179. **The Quantum Century: 100 Years of the Bohr Atom**, Copenhagen (Denmark), 3-4 October 2013
Probing and Exploring at the Single Atom Level

178. **International BEC Conference**, San Feliu de Guixol (Spain), 8-12 September 2013
Probing and Controlling Quantum Matter in New Paramter Regimes

177. **Frontiers of Quantum Physics and Quantum Information**, ICFO Barcelona (Spain), 25-27 July 2013
Ultracold Quantum Gases in Optical Lattices

176. **International Conference on Quantum Technologies**, Moscow (Russia), 20-24 July 2013
From Spin Dynamics to Topological Bloch Bands with Ultracold Atoms

175. **Synthetic Gauge Fields for Atoms and Photons**, Trento (Italy), 8-12 July 2013
Probing Quantum Matter in Topological Bloch Bands

174. **QIPC Conference**, Florence (Italy), 1-5 July 2013
Quantum Matter under the Microscope

173. **Gordon Conference on Atomic Physics**, Newport (USA), 24-28 June 2013
Realizing Quantum Matter with Ultracold Atoms and Ions

172. **50 Years Hubbard Model**, University College London (UK), 18 June 2013
Probing Quantum Matter at the Single Atom Level

171. **Quantum Optics 8**, Jachranka (Poland), 30 May 2013
Exploring Quantum Matter Using Ultracold Atoms in Optical Lattices

170. **IQEC/CLEO 2013 – Keynote Talk**, Munich (Germany), 14 May 2013
Quantum Simulations Using Ultracold Atoms

169. **Workshop on New Magnetic Field Frontiers**, Les Houches (France), 10 May 2013
Quantum Magnetism Using Ultracold Atoms in Optical Lattices

168. **Workshop on Light Matter Interactions**, Ein Gedi (Israel), 22-25 April 2013
Probing Non-Equilibrium Dynamics Using Ultracold Atoms in Optical Lattices

167. **Collège de France**, Paris (France), 2 April 2013
Probing Quantum Matter Using Ultracold Quantum Gases

166. **Solvay Colloquium – ULB Brussels**, Brussels (Belgium), 26 March 2013
Probing and Controlling Quantum Matter at the Single Atom Level

165. **Anderson-Higgs Focus Session – APS March Meeting 2013**, Baltimore (USA), 18-22 March 2013
The 'Higgs' Amplitude Mode at the Two-Dimensional Superfluid to Mott Insulator Transition

164. **Physics Days – Finnish Physical Society (Plenary Talk)**, Espoo (Finland), 15 March 2013
Probing and Controlling Ultracold Quantum Matter

163. **IST Austria – Colloquium**, Klosterneuburg (Austria), 25 February 2013
Probing and Controlling Ultracold Quantum Matter

162. **FINESS 2013**, Queenstown (New Zealand), 17-20 February 2013
Probing Non-Equilibrium Dynamics Using Ultracold Quantum Gases

161. **NORDITA Workshop – Pushing the Boundaries with Cold Atoms**, Stockholm (Sweden), 6-8 February 2013
New Frontiers with Ultracold Quantum Gases in Optical Lattices

160. **Physics Colloquium at the Technion**, Haifa (Israel), 28 January 2013
Probing Quantum Matter under Extreme Conditions

159. **Physics@FOM**, Focus Session "From Ultracold to Ultrahot", Veldhoven (Netherlands), 23 January 2013
Probing Quantum Matter under Extreme Conditions

158. **Quantum Information Meets Statistical Mechanics (QISM)**, Innsbruck (Austria), 22-25 September 2012
Ultracold Quantum Gases under Extreme Conditions

157. **Nanosciences: Soft, Solid, Alive and Kicking**, Venice (Italy), 17-21 September 2012
Exploring Quantum Matter using Ultracold Quantum Gases

156. **Dynamics and Thermodynamics in Isolated Quantum Systems - KITP**, Santa Barbara (USA), 20-24 August 2012
Probing Non-Equilibrium Dynamics Using Ultracold Quantum Gases in Optical Lattices

155. **Gordon Research Conference (GRC) on Quantum Science**, Easton (USA), 15-17 August 2012
Exploring Static and Dynamical Properties of Quantum Gases at the Single Atom Level

154. **Les Houches Physics School on Strongly Interacting Quantum Systems out of Equilibrium - Lecture Series**, Les Houches (France), 13-15 August 2012
Probing Dynamical and Static Properties of Quantum Matter Using Ultracold Atoms

153. **International Conference on Atomic Physics (ICAP) 2012 – Keynote Talk**, Paris (France), 23-27 July 2012
Quantum Matter under Extreme Conditions

152. **Princeton Workshop on Non-Equilibrium Phenomena in Ultracold Atoms and Strongly Interacting Photons**, Princeton (USA), 11-13 June 2012
Exploring Static and Dynamic Properties of Quantum Matter at the Single Atom Level

151. **New Quantum States of Matter In and Out of Equilibrium**, Florence (Italy), 21-25 May 2012
Probing Quantum Gases In- and Out of Equilibrium

150. **Quantum Interfaces**, Chicheley Hall (UK), 14-15 May 2012
Probing Quantum Many-Body Systems at the Single Atom Level

149. **Workshop on Quantum Gases**, Trento (Italy), 12 March 2012
Observing and Controlling Quantum Matter at the Single Atom Level

148. **AQUTE Winter School on Quantum Information Processing**, Obergurgl (Austria), 6-10 February 2012
Observing and Controlling Quantum Matter at the Single Atom Level

147. **Center for Quantum Technologies**, 4th Anniversary, National University of Singapore (Singapore), 7 December 2011
Observing and Controlling Quantum Matter at the Single Atom Level

146. **ITAMP/Harvard Quantum Optics Center Colloquium**, Harvard University (USA), 1 December 2011
Observing and Controlling Quantum Matter

145. **Ehrenfest Colloquium**, Leiden University (NL), 23 November 2011
Observing and Controlling Quantum Matter

144. **LENS Colloquium**, Florence (Italy), 20 October 2011
Probing and Controlling Strongly Interacting Quantum Matter

143. **Quantum Information Processing Conference**, Zurich (Switzerland), 5-7 September 2011
Probing and Controlling Strongly Interacting Quantum Matter

142. **Scottish University Summer School in Physics**, Glasgow (UK), 2-4 August 2011
Introduction to Many-Body Physics with Ultracold Atoms

141. **Frontiers of Quantum and Mesoscopic Thermodynamics (FQMT)**, Prague (Czech Republic), 27-29 July 2011
Probing and Controlling Strongly Interacting Quantum Matter at the Single-Atom Level

140. **Summer School on "Quantum Machines"**, Les Houches (France), 13-15 July 2011
Ultracold Quantum Gases in Optical Lattices

139. **EGAS Conference**, Fribourg (Switzerland), 29 June-1 July 2011
Probing and Controlling Strongly Interacting Quantum Matter at the Single-Atom Level

138. **DAMOP APS Meeting**, Atlanta (USA), 15-17 June 2011
Probing and Controlling Strongly Interacting Quantum Matter at the Single-Atom Level

137. **Summer School on Disordered Quantum Systems**, Cargese (France), 30 May-5 June 2011
Introduction to Many-Body Physics with Ultracold Atoms

136. **Workshop on Quantum Science and Technologies**, Rovereto (Italy), 10-11 May 2011
Probing Strongly Interacting Quantum Matter using Ultracold Quantum Gases

135. **International Conference on Quantum Technologies**, Munich (Germany), 9 May 2011
Ultracold Atoms in Optical Lattices

134. **Physics Colloquium**, Southampton University, Southampton (UK), 10 December 2010
Exploring Strongly Correlate Quantum Matter in Artificial Crystals of Light

133. **Entanglement in Atomic Systems**, Weizmann Institute of Science (Israel), 21-25 November 2010
Detecting and Controlling Correlations and Entanglement in Ultracold Atomic Gases

132. **JILA Seminar**, Boulder, CO (USA), 30 September 2010
Non-equilibrium dynamics and single-site imaging of ultracold atoms in optical lattices

131. **Physics Colloquium**, University of Colorado in Boulder, Boulder, CO (USA), 29 September 2010
Exploring Strongly Correlated Quantum Matter in Artificial Crystals of Light

130. **Beyond Optical Lattice – KITP program**, KITP Santa Barbara (USA), 21 September 2010
Single Site and Single Atom Imaging of Strongly Correlated Quantum Gases

129. **Controlled Quantum Dynamics and QUAMP Summer School**, London (UK), 31 August -3 September 2010
Ultracold Bosonic and Fermionic Atoms in Optical Lattices

128. **Quantum Solids, Liquids and Gases**, NORDITA Stockholm (Sweden), 23 August 2010
Non-equilibrium Dynamics and Single Site Addressing in Strongly Interacting Quantum Gases in Optical Lattices

127. **Many-body Physics with Ultracold Atoms**, Les Houches (France), 11-16 July 2010
Ultracold Bosonic and Fermionic Atoms in Optical Lattices

126. **Workshop on Dynamics of Strongly Correlated Quantum Systems**, ICTP Trieste (Italy), 21-25 June 2010
Non-equilibrium Dynamics of Bosons and Fermions in Optical Lattices

125. **OptETH Colloquium ETH Zurich**, ETH Zurich (Switzerland), 31 May 2010
Exploring Quantum Matter with Ultracold Atoms

124. **CIFAR Quantum Materials Program Meeting**, Montreal (Canada), 5-9 May 2010
Non-Equilibrium Dynamics of Strongly Interacting Bosonic and Fermionic Quantum Gases

123. **Kavli Colloquium (TU Delft & Kavli Institute for Nanoscience)**, Delft (Netherlands), 14-16 April 2010
Exploring Quantum Matter with Ultracold Atoms

122. **Physics Colloquium (Ohio State University OSU)**, Columbus (USA), 15-17 February 2009
Exploring Quantum Matter with Ultracold Atoms

121. **KITPC Workshop on Cold Quantum Gases**, Beijing (China), 12-15 October, 2009
Non-Equilibrium Dynamics of Strongly Interacting Bosonic and Fermionic Quantum Gases

120. **Frontiers of Science Plenary Talk at KITPC**, Beijing (China), 13 October 2009
Exploring Quantum Matter with the Coldest Objects in the Universe

119. **Physics Colloquium**, Princeton University, Princeton (USA), 10 October 2009
Exploring Quantum Matter with Ultracold Atoms

118. **JQI Seminar (University of Maryland & NIST)**, College Park (USA), 7 October 2009
Non-Equilibrium Dynamics of Strongly Interacting Bosonic and Fermionic Quantum Gases

117. **Physics Colloquium Fribourg**, Fribourg (Switzerland), 30 September 2009
Exploring Quantum Matter with Ultracold Atoms

116. **FET Seminar at the European Commission**, Brussels (Belgium), 17 September 2009
Quantum Simulations

115. **BEC2009 Conference**, San Feliu (Spain), 6-10 September 2009
Non-Equilibrium Dynamics of Strongly Interacting Bosonic and Fermionic Quantum Gases

114. **ICREA Workshop on Artificial Gauge Fields**, San Benet (Spain), 1-4 September 2009
Preparing and Manipulating Exotic Quantum States in Optical Lattices

113. **SCALA Summer School on Quantum Optics & Quantum Information**, Cargèse (France), 22-25 August 2009
Ultracold Bosonic and Fermionic Quantum Gases in Optical Lattices

112. **International Conference on Laser Spectroscopy (ICOLS09)**, Memanbetsu (Japan), 8-12 June 2009
Strongly Correlated Bosons and Fermions in Optical Lattices

111. **Seminar Physics Department École Polytechnique**, Paris (France), 31 March-1 April 2009
Strongly Correlated Quantum Matter in Optical Lattices

110. **LOWDIM KITP Conference**, St. Barbara (USA), 21-26 February 2009
Strongly Correlated Quantum Matter in Optical Lattices

109. **NordForsk Meeting**, Copenhagen (Denmark), 15-16 January 2009
New Light on Bosons, Fermions and Bose-Fermi Mixtures in Optical Lattices

108. **International Symposium on Physics of Quantum Technology**, Nara (Japan), 24-28 November 2008
New Light on Bosons, Fermions and Bose-Fermi Mixtures in Optical Lattices

107. **Frontiers of Degenerate Quantum Gases**, Beijing (China), 20-24 October 2008
New Light on Bosons, Fermions and Bose-Fermi Mixtures in Optical Lattices

106. **Solvay Conference on Condensed Matter Physics - (Rapporteur talk)**, Brussels (Belgium), 11-13 October 2008
Strongly Correlated Quantum Systems with Ultracold Atoms in Optical Lattices

105. **Quantum Fluids and Strongly Correlated Systems**, Paris (France), 15-16 September 2008
Strongly Correlated Fermions and Bose-Fermi Mixtures in Optical Lattices

104. **Low Temperature Physics LT25**, Amsterdam (Netherlands), 10-12 August 2008
Strongly Correlated Fermions and Bose-Fermi Mixtures in Optical Lattices

103. **International Conference on Atomic Physics (ICAP) 2008**, University of Connecticut Storrs (USA), 26 July-1 August 2008
Strongly Correlated Fermions and Bose-Fermi Mixtures in Optical Lattices

102. **DAMOP 2008**, PennState University (USA), 27-31 May 2008
Towards Quantum Magnetism with Ultracold Atoms

101. **Workshop on Quantum Phenomena and Information: From Atomic to Mesoscopic System**, Trieste (Italy), 5-16 May 2008
Exploring Quantum Matter with Ultracold Atom in Optical Lattices

100. **Lecture Series at the Israel Institute of Technology (Technion)**, Haifa (Israel), 10-15 April, 2008
Ultracold Quantum Gases

99. **INTERF08 Meeting**, Levico (Italy), 3-5 April 2008
Noise Correlations and Spin Squeezing with Ultracold Atoms
98. **APS March Meeting**, New Orleans (USA), 10-14 March 2008
Exploring Quantum Matter with Ultracold Atoms in Optical Lattices
97. **ESF Conference on Quantum Optics**, Obergurgl (Austria), 25-27 February 2008
Ultracold Atoms in Optical Lattices
96. **Quantum Noise in Correlated Systems**, Rehovot (Israel), Weizmann Institute, 5-11 January 2008
Probing Quantum Matter in Optical Lattices
95. **Winter School on Theoretical Condensed Matter Physics**, Jerusalem (Israel), 26 December – 4 January 2008
Ultracold Quantum Gases in Optical Lattices
94. **Harvard Theory Seminar**, Harvard (USA), 25 October 2007
Exploring Quantum Matter with Ultracold Atoms in Optical Lattices
93. **Stanford Physics Colloquium**, Stanford (USA), 23 October 2007
Exploring Quantum Matter with Ultracold Atoms
92. **Opening of CoQus (Graduate School on Complex Quantum Systems)**, Vienna (Austria), 8 October 2007
Exploring Quantum Matter with Ultracold Atoms in Optical Lattices
91. **Bose-Einstein Condensation 2007 – Frontiers in Quantum Gases**, San Feliu des Guixols (Spain), 15-20 September 2007
Towards Quantum Magnetism with Ultracold Atoms in Optical Lattices
90. **Quantum, Atomic & Molecular Physics Conference (QuAMP)**, London (UK), 10-13 September 2007
Towards Quantum Magnetism with Ultracold Atoms in Optical Lattices
89. **Summer School on Novel Quantum Phases and Non-equilibrium Phenomena in Cold Atomic Gases**, Trieste (Italy), 27 August-7 September 2007
Exploring Quantum Matter with Ultracold Atoms in Optical Lattices
88. **International School on Quantum Fluids**, Brasilia (Brazil), 14-20 August 2007
Ultracold Atoms in Optical Lattices
87. **Conference on "Exploring Quantum Matter: Visions and Opportunities"**, St. Andrews (UK), 2-6 July 2007
Exploring Quantum Matter with Ultracold Atoms in Optical Lattices
86. **Conference on "Recent progress in the studies of quantum gases: theory and experiments"**, Paris (France), 28 June 2007
Towards Quantum Magnetism with Ultracold Atoms in Optical Lattices
85. **International Conference on Laser Spectroscopy – ICOLS**, Telluride (USA), 24-28 June 2007
Towards Quantum Magnetism with Ultracold Atoms in Optical Lattices
84. **International Conference on Quantum Electronics IQEC – Tutorial lecture**, Munich, 20 June 2007
Ultracold Atoms in Optical Lattices
83. **Center for Ultracold Atoms (CUA) Colloquium – Harvard University**, Boston (USA), 8 May 2007
Towards Quantum Magnetism with Ultracold Atoms in Optical Lattices
82. **Condensed Matter Physics Seminar Boston University**, Boston (USA), 7 May 2007
Strongly Correlated Many Body Physics with Ultracold Atoms in Optical Lattices
81. **Physics Colloquium – University of California Santa Barbara**, Santa Barbara (USA), 1 May 2007
Experimenting with Ultracold Atoms in Optical Lattices
80. **KITP Workshop on "Strongly Correlated Phases in Condensed Matter and Degenerate Atomic Systems"**, Santa Barbara (USA), 22-28 April 2007
Strongly Correlated Quantum Phases with Ultracold Atoms in Optical Lattices
79. **Gordon Research Conference on Quantum Information**, Il Ciocco (Italy), 16-20 April 2007
Quantum Information Processing with Neutral Atoms
78. **Measurement based Quantum Computing Workshop**, Oxford (UK), 21-23 March 2007
Entangling Neutral Atoms in Optical Lattices
77. **Symposium on Ultracold Quantum Gases – Talk with Elliot Lieb**, Aarhus (Denmark), 6-7 November 2006
Strongly correlated atoms in optical lattices
76. **Canadian Institute of Advanced Research – Quantum Materials Meeting**, Vancouver (Canada), 19-21 October 2006
Strongly correlated atoms in optical lattices

75. **7th European QIPC Workshop at the Royal Society**, London (UK), 13-14 October 2006
Quantum Information Processing with Neutral Atoms
74. **Theory Colloquium University of Geneva**, Geneva (Switzerland), 5 October 2006
Strongly Correlated Quantum Matter in Optical Lattices
73. **ICO (International Commission of Optics) Meeting**, Plenary Talk, St. Petersburg (Russia), 3-6 September 2006
Exploring Quantum Matter in Artificial Crystals of Light
72. **ICAP 2006 (International Conference on Atomic Physics)**, Innsbruck (Austria), 16-21 July 2006
Strongly Correlated Quantum Matter in Optical Lattices
71. **Varenna Summer School on "Ultracold Fermi Gases"**, Varenna (Italy), 29-30 June 2006
Strongly Correlated Quantum Matter in Optical Lattices
70. **Gordon Research Conference on Quantum Information Science**, Il Ciocco, Castelvecchio (Italy), 7-12 May 2006
Entangling Neutral Atoms in Optical Lattices
69. **Meeting of the Dutch and Belgian Physics Society**, FYSICA 2006, Plenary talk, Leiden (Netherlands), 28 April 2006
New Light on Modern Optics
68. **Stockholm University (KTP)**, Physics Colloquium, Stockholm (Sweden), 23-24 March 2006
Exploring Quantum Matter in Artifical Crystals of Light
67. **Ehrenfest Colloquium**, Leiden (Netherlands), 15 February 2006
Exploring Quantum Matter in Artificial Crystals of Light
66. **Non-equilibrium Phenomena in Strongly Correlated Quantum Systems**, ITAMP Workshop, Boston (USA), 9-12 February 2006
Coherence, Correlations & Counting Statistics of Ultracold Atoms in Optical Lattices
65. **DAAD/DFG organized Promotional Lecture/Dinner Talk**, London (UK), 1 December 2005
Ultracold Atoms – From Einstein's Dream to Reality
64. **KVDS Meeting on Quantum Information**, Copenhagen (Denmark), 18-19 November 2005
Entangling Neutral Atoms in Optical Lattices
63. **AMOP Meeting of the Dutch Physical Society**, Plenary talk, Lunteren (Netherlands), 11-12 November 2005
Mott Insulators, Noise Correlations and Coherent Spin Dynamics in Optical Lattices
62. **Technical University of Eindhoven**, Physics Colloquium, Eindhoven (Netherlands), 27-28 October 2005
Exploring Quantum Matter in Crystals of Light
61. **European Science Foundation Meeting on BEC**, San Feliu (Spain), 10-15 September 2005
Mott Insulators, Noise Correlations and Coherent Spin Dynamics in Optical Lattices
60. **Summer School on Quantum Information**, Kochi (Japan), 1-7 September 2005
Lecture Series on Quantum Information with Ultracold Atoms in Optical Lattices
59. **OSA Invited Lecturer for Developing Countries**, Yerevan (Armenia), 22-26 August 2005
Lecture Series on Ultracold Atoms
58. **Low Temperature Physics 24**, Plenary talk, Orlando (USA), 10-12 August 2005
Mott Insulators, Noise Correlations and Coherent Spin Dynamics in Optical Lattices
57. **Low-D Workshop Amsterdam**, Amsterdam (Netherlands), 28-30 July 2005
Strongly Correlated Quantum Matter in Optical Lattices
56. **International Conference on Quantum Electronics**, IQEC 2006, Tokyo (Japan), 13-16 July 2005
Mott Insulators, Noise Correlations and Coherent Spin Dynamics in Optical Lattices
55. **Quantum Optics VI**, EQEC - Keynote Talk, Munich (Germany), 17 June 2005
Spatial Quantum Noise Interferometry and more...
54. **Aspen Workshop on Ultracold Quantum Gases**, Aspen (USA), 4-6 June 2005
Lecture Series on Correlations and Coherent Spin Oscillations
53. **Annual Meeting Finnish Optical Society**, Plenary talk, Jväskylä (Finland), 12-13 May 2005
Exploring Quantum Matter in Artificial Crystals of Light
52. **IOP – Einstein Year 2005 Symposium**, Plenary talk, Warwick (UK), 11-14 April 2005
Exploring Quantum Matter with Ultracold Atoms in Optical Lattices
51. **International Meeting on Mesoscopic Physics with Matter and Waves**, Orsay (France), 21-22 March 2005
Exploring Strongly Correlated Quantum Systems with Neutral Atoms in Optical Lattices

50. **International Seminar on Atomic Processes in Intense Laser Fields and Related Many-Body Phenomena**, Shonan Village Center (Japan), 21-23 January 2005
From Quantum Simulators to Quantum Gates with Neutral Atoms in Optical Lattices
49. **Van der Waals-Zeeman-Institute (University of Amsterdam) Physics Colloquium**, Amsterdam (Netherlands), 11 January 2005
Exploring Strongly Correlated Quantum Systems with Ultracold Atoms in Optical Lattices
48. **University of Geneva - Physics Colloquium**, Geneva (Switzerland), 15 November 2004
Exploring Strongly Correlated Quantum Matter with Ultracold Atoms in Optical Lattices
47. **Les Houches Workshop 2004**, Les Houches (France) 20-23 September 2004
Neutral Atoms in Optical Lattices – from Quantum Simulators to Multiparticle Entanglement
46. **International Conference on Quantum Logic and Communications**, Cargese (Corse), 22-26 August 2004
Neutral Atoms in Optical Lattices – from Quantum Simulators to Multiparticle Entanglement
45. **International Conference on Atomic Physics - ICAP 2004**, IFSC, Rio de Janeiro, (Brazil) 24 July - 1 August 2004
Engineering Multiparticle Entanglement with Neutral Atoms in Optical Lattices
44. **EGAS 2004**, Journal of Physics B Plenary Lecture, Rennes (France), 4-11 July 2004
Exploring quantum matter in artificial crystals of light
43. **College de France**, College de France, Paris (France), 25-26 May 2004
Exploring and controlling quantum matter in artificial crystals of light
42. **Conference on Ultracold Quantum Gases**, Kavli Institute, Santa Barbara, (USA), 8-15 May 2004
Tonks-Girardeau gas in an optical lattice
41. **Plenary Talk at the Annual Spring Meeting of the American Physical Society**, Montreal (Canada), 20-26 March 2004
Exploring quantum many body phases in optical lattice potentials
40. **QUEST-Meeting**, La Thuile (Suisse), 7-12 March 2004
Engineering entanglement of ultra cold atoms in optical lattices
39. **Workshop on Ultra Cold Gases**, Levico (Italy), 3-6 March 2004
Fermionizing bosons in optical lattices
38. **Arkadi Aronov Memorial Lecture at the Weizman Institute of Science**, Tel Aviv, (Israel), 25-29 February 2004
Exploring quantum matter in optical lattices
37. **Plenary Talk at the Annual Spring Meeting of the AAAS**, Seattle, (USA), 13-16 February 2004
Controlling matter at the quantum limit
36. **École-Normale-Superieure – Physics Colloquium**, Paris (France), 20 November 2003
Exploring quantum matter in artificial crystals of light
35. **European Science Foundation - BEC2003**, San Feliu (Spain), 13-18 September 2003
Controlled Collisions with Neutral Atoms in Optical Lattices
34. **Quantum Challenges Conference**, Warsaw (Poland), 4-7 September 2003
Controlling Many-Body States of Neutral Atoms in Optical Lattices
33. **Gordon Research Conference – Quantum Control of Light and Matter**, Mount Holyoke College (USA), 3-8 August 2003
Control of Matter in Lattices of Light
32. **Plenary Talk at the Annual Meeting of the French Physical Society SFP**, Lyon (France), 7-9 July 2003
Bose-Einstein Condensates in Optical Lattices
31. **EQEC – European Quantum Electronics Conference 2003**, Munich (Germany), 26 June 2003
Controlled Collisions for Multiparticle Entanglement
30. **University of Oxford – Physics Department Seminar**, Oxford (United Kingdom), 16 June 2003
Controlled Collisions for Multiparticle Entanglement
29. **IQEC-CLEO International Quantum Electronics Conference 2003**, Baltimore (USA), 4-7 June 2003
Controlled Collisions with Neutral Atoms in Optical Lattices
28. **HANSCOM Research Laboratories**, Boston (USA), 16 May 2003
Bose-Einstein Condensates in Optical Lattices
27. **Massachusetts Institute of Technology (MIT) – Physics colloquium**, Massachusetts Institute of Technology, Boston (USA) 15 May 2003
Seeing the Particles beneath the Waves – Beyond Mean Field Physics with Bose-Einstein-Condensates in Optical Lattices

26. **Center for Ultracold Atoms - Colloquium**, Center for Ultracold Atoms, Boston (USA), 13 May 2003
Controlled Collisions with Neutral Atoms in Optical Lattices
25. **Harvard University - Physics colloquium**, Harvard University, Boston (USA), 12 May 2003
Seeing the Particles beneath the Waves – Beyond Mean Field Physics with Bose-Einstein-Condensates in Optical Lattices
24. **Correlation Effects in Bose-Einstein Condensates and Degenerate Fermi Gases**, University of Minneapolis, Minneapolis (USA), 2-4 May 2003
Controlled Collisions with Neutral Atoms in Optical Lattices
23. **University of Strathclyde**, Physics Department, Glasgow (UK), 19 March 2003
Seeing the particles beneath the waves – Beyond mean field physics with Bose-Einstein condensates in optical lattices
22. **Obergurgl Quantum Optics Meeting 2003**, Obergurgl (Austria), 24 February 2003
Controlled Collisions with Neutral Atoms in Optical Lattices
21. **American Association for the Advancement of Science (AAAS) Quantum Phases and Quantum Phase Transitions**, Denver (USA), 15 February 2003
Quantum phase transition from a superfluid to a Mott insulator in a gas of ultracold atoms
20. **Collège de France Symposium "Cold atoms and quantum information"**, Paris (France), 7 February 2002
Controlled collisions with neutral atoms in optical lattices
19. **Royal Society workshop on "Practical realizations of quantum computing" London (UK)**, 13-14 November 2002
Controlled collisions with neutral atoms in optical lattices
18. **NIST Seminar**, Gaithersburg (USA), 7 November 2002
Controlled collisions with neutral atoms in optical lattices
17. **Stanford University**, Physics Colloquium, Stanford (USA), 5 November 2002
Seeing the particles beneath the waves
16. **7th International Workshop on Atom Optics and Interferometry**, Lunteren (Netherlands), September/October 2002
Beyond mean field physics with Bose-Einstein condensates in optical lattices
15. **University of California Berkeley**, Physics Department, Berkeley (USA), August 2002
Quantum phase transition from a superfluid to a Mott insulator in an ultracold gas of atoms
14. **International Conference on Atomic Physics (ICAP)**, Boston (USA), August 2002
Seeing the particles beneath the waves – Beyond mean field physics with Bose-Einstein condensates in optical lattices
13. **International Conference on Laser Physics LPHYS 2002**, Bratislava (Slovakia), July 2002
Quantum phase transition from a superfluid to a Mott insulator in an ultracold gas of atoms
12. **NIST Workshop on Quantum Computing**, Gaithersburg (USA), June 2002
Beyond mean field physics with Bose-Einstein condensates in optical lattices
11. **DAMOP 2002 Meeting**, Williamsburg, Williamsburg (USA), May 2002
Quantum phase transition from a superfluid to a Mott insulator in an ultracold gas of atoms
10. **Stanford University**, Physics & Applied Physics Department, Stanford (USA), 6 May 2002
Quantum phase transition from a superfluid to a Mott insulator in an ultracold gas of atoms
9. **Yale Physics Club**, (Physics Colloquium of Yale University), Yale, New Haven (USA), 22 February 2002
Quantum phase transition from a superfluid to a Mott insulator in an ultracold gas of atoms
8. **Physics Colloquium of the University of Trento**, Trento (Italy), 17 January 2002
Quantum phase transition from a superfluid to a Mott insulator in an ultracold gas of atoms
7. **CUA/ITAMP Workshop**, Beyond BEC: Ultracold Atoms beyond Mean-Field Physics, Harvard, Cambridge (USA), 2-3 November 2001
Quantum phase transition from a superfluid to a Mott insulator
6. **Physics Colloquium of the University of Innsbruck**, Innsbruck, 30 October 2001
Quantum phase transition from a superfluid to a Mott insulator
5. **Euresco Conference**, Bose-Einstein condensation, San Feliu de Guixols (Spain), 15-20 September 2001
Quantum phase transition from a superfluid to a Mott insulator
4. **5th RIKEN International Conference**, Coherent Control in Matter, Shonan Village Center, Hayama (Japan), 22-25 April 2001
Atom lasers and phase coherence of Bose-gases

3. **Quantum Optics and Spectroscopy Seminar**, Institute for Experimental Physics, University of Innsbruck, Innsbruck (Austria), 17 January 2001
   Atom lasers
2. **9th Annual International Laser Physics Workshop**, LPHYS'2000, Bordeaux (France), 17-21 July, 2000
   Atom lasers and phase coherence of Bose-gases
1. **Les Houches Workshop**, Atom Optics Applications, Les Houches (France), 23-28 May 1999
   Atom lasers and coherence properties of BECs

Further Invited Talks (Germany)

166. **Schule MIT Wissenschaft**, 6 October 2026, Garching (Germany)
   Quantensimulation und Quantencomputing mit ultrakalten Atomen
165. **SimQuDyn**, Munich (Germany), 30 March 2026
   Quantum Simulation with Ultracold Fermions in Optical Lattices
164. **TU Munich - Future of Computing | Quantum Connect 2026**, Munich (Germany), 3 March 2026
   From Quantum Simulation to Quantum Computing with Neutral Atoms
163. **DPG 100 Years of Quantum Physics – Plenary Talk**, Göttingen, 12 September 2025
   Quantum Simulation and Quantum Computing with Ultracold Atoms
162. **Max Weber Programm Jahrestreffen**, Amerikahaus, München, 14 July 2025
   Quantensimulationen mit Ultrakalten Atomen: Experimentieren mit den kältesten Objekten des Universums
161. **Tag der Offenen Tür – Schloss Ringberg**, Schloss Ringberg, 12 July 2025
   Vom Quantensimulator zum Quantencomputer: Experimentieren mit den kältesten Objekten des Universums
160. **Falling Walls Science Summit 2024**, Berlin (Germany), 9 November 2024
   Understanding Quantum Worlds
159. **Highlights der Physik 2024**, Public Talk, Hannover (Germany), 27 September 2024
   Quantensimulation, Quantencomputing und die kältesten Objekte des Universums
158. **FOR5522 PhD School on Non-Ergodic Dynamics**, Göttingen (Germany), 27 September 2024
   Probing Quantum Dynamics using Ultracold Atoms in Optical Lattices
157. **CalBay Meeting**, Munich (Germany), 12 June 2024
   Quantum Simulation with Atoms, Photons and Molecules
156. **Munich Conference on QST**, Sonthofen, 14 May 2024
   Quantum Stammtisch: Quantum Computing: A dream or a reality?
155. **DPG Haupttagung**, Plenary Talk, Berlin (Germany), 19 March 2024
   Quantum Simulation with Atoms, Photons and Molecules
154. **DPG SAMOP Spring Meeting**, Invited Talk, Freiburg (Germany), 12 March 2024
   Quantum Simulation with Atoms, Photons and Molecules
153. **GEIST - International Science Festival Heidelberg @ dai**, Heidelberg, 28 November, 2023
   Von den kältesten Atomen zu Feynman's Quantensimulator & Quantencomputer
152. **BOSCH Forschungscampus**, Internal Talk, Renningen, 14 November, 2023
   Quantum Computing and Quantum Simulation using Ultracold Atoms
151. **Quantum Spots 2023**, Bad Driburg, 9 November, 2023
   New Avenues for Quantum Simulation with Ultracold Atoms, Molecules and Photons
150. **Steinbeis University**, EASA, TUMint & IBM Quanten-Computer Symposium, Munich, 9 April, 2023
   Von den kältesten Atomen zu Feynman's Quantensimulator und Quantencomputer
149. **QUANTUM Seminar**, Mainz (Germany), 9 February, 2023
   Vom Quantencomputer zum Quantensensor
148. **Quantentechnologie Workshop BBAW**, Berlin, 26 November, 2022
   Quantencomputing und Quantensimulation – wo stehen wir?
147. **VDE/ZVEI Symposium Microelectronics for Future**, Berlin, 8 November, 2022
   Vom Quantencomputer zum Quantensensor
146. **WE-Heraeus-Symposium – Recent Progress in Quantum Computing**, Berlin, 3 November, 2022
   Quantum Simulation and Quantum Computing using Ultracold Atoms
145. **Werner Heisenberg und die Zukunft der Quantenphysik Heisenberg Gesellschaft**, Munich, 28 October, 2022
   Von den kältesten Atomen zu Feynman's Quantensimulator und Quantencomputer

144. **Max Planck Förderstiftung**, Schloss Ringberg (Germany), 14 October 2022
Vom Quantencomputer zum Quantensensor

143. **MQV Review Meeting**, Eichstätt, 4-6 October, 2022
Quantencomputing mit Neutralatomen

142. **FORSCHA - Münchner Wissenschaftstage**, Munich, 24 June, 2022
Vom Quantensensor zum Quantencomputer

141. **727. WE-Heraeus-Seminar/ Frontiers of Quantum Gas Microscopy**, Bad Honnef (Germany), Invited Talk 4-8 April 2022
Probing Quantum Matter In- and Out-of-Equilibrium using Quantum Gas Microscopes

140. **Hamburg Theory Symposium**, Hamburg, 10-12 November 2021
Probing Quantum Matter In- and Out-Of-Equilibrium on a Large Scale Atomic Quantum Simulator

139. **Ergodicity Breaking and Anomalous Transport in Quantum Many-Body Systems**, Dresden MPIPKS, Videoconference talk, 6 October 2021
Probing Kardar-Parisi-Zhang Universality in Heisenberg Quantum Magnets

138. **Hamburg Photon Science Colloquium**, Hamburg, Videoconference colloquium, 4 June 2021
Probing Quantum Matter on a Large-Scale Atomic Quantum Simulator

137. **PGI Colloquium**, FZ Jülich, Videoconference colloquium, 21 May 2021
Probing Quantum Matter on a Large-Scale Atomic Quantum Simulator

136. **Hochschule München**, Videoconference, 19 March 2021
Engineering and Probing Quantum Matter using Quantum Simulations & Munich Quantum Valley

135. **Fraunhofer Gesellschaft FhG**, Video conference, 9 March 2021
Quantum Simulation and Quantum Computing using Neutral Atoms in Optical Lattices

134. **ColOpt ITN Network Meeting**, Münster, 18 February 2020
Engineered Ultracold Quantum Matter - From Quantum Simulations to Novel Quantum Light-Atom Interfaces

133. **CAS Showcase**, LMU Munich, 16 January 2020
Quantum Research

132. **Coherence in Fermionic Matter: Fermion Pairing in Cold Atoms and Superconductors**, WE Heraeus Seminar Bad Honnef, 15-16 October 2019
Quantum Gas Microscopy of the (Fermi) Hubbard Model

131. **Spins in a Quantum 1D Multi-particle Environment**, 2-5 September 2019
Quantum Gas Microscopy of the (Fermi) Hubbard Model

130. **Physik im Theater**, Public lecture, Mainz, 5 June 2019
Kälter geht (fast) nicht

129. **Colloquium University of Mainz**, Mainz, 2 June 2019
Large Scale Quantum Simulations Using Ultracold Atoms

128. **Colloquium Univeristy of Stuttgart**, Stuttgart, 30 April 2019
Realising Richard Feynman's dream of a Quantum Simulator

127. **Colloquium @ MPIPKS Workshop on "Anderson Localization and Interaction Effects"**, 24-25 September 2018
Probing Many Body-Localization Using Ultracold Quantum Gases

126. **DOPPLERS Meeting - Deutsche Olympiade in Physik Problemen**, 3 March 2018
Probing and Controlling Quantum Matter at the Single Atom Level

125. **Inauguration MPQ-Harvard Quantum Center**, Munich, 12 January 2018
Large Scale Quantum Simulations Using Ultracold Atoms in Optical Lattices

124. **University of Regensburg**, Physik Kolloquium, Regensburg, 11 December 2017
Large Scale Quantum Simulations Using Ultracold Atoms in Optical Lattices

123. **Science Fair @ LMU**, Munich, 7 June 2017
Ultracold Quantum Gases

122. **Workshop on Floquet Systems**, MPIPKS Dresden, Dresden, 8-9 August 2016
Many-Body Localization from an Experimental Ultracold Atom Perspective

121. **Technische Universität Kaiserslautern**, Physik Kolloquium, Kaiserslautern, 27 June 2016
Probing and Controlling Quantum Matter at the Single Atom Level

120. **Workshop on Topological Phenomena in Novel Quantum Matter**, MPIPKS Dresden, 2-3 March 2016
Probing and Controlling Bloch Band Topology with Ultracold Atoms

119. **DPG Symposium - Synthesized Gauge Fields and Experimental Realizations**, 1 March 2016
Probing Bloch Band Topology using Ultracold Atoms

118. **University of Bayreuth**, Physik Kolloquium, Bayreuth, 19 January 2016
Probing and Controlling Quantum Matter at the Single Atom Level

117. **Arnold Sommerfeld School**, Munich 21 October 2015,
Realizing and Probing Artificial Gauge Fields with Ultracold Atoms

116. **Frontiers of Quantum Information and Quantum Simulation**, Heidelberg, 20 July 2015
From Rydberg Gases to Many-Body Localisation - New Frontiers for Ultracold Atoms

115. **Physikalisches Kolloquium**, Universität Bielefeld, Bielefeld, 8 June 2015
Controlling and Exploring Quantum Matter at the Single Atom Level

114. **DPG Spring Meeting – Berlin**, Berlin, 17 March 2015
Probing Non-Equilibrium Dynamics with Ultracold Atoms

113. **Many-Body Dynamics Out Of Equilibrium – MPIK Dresden**, Dresden, 10 March 2015
Probing Quantum Many-Body Systems Out Of Equilibrium

112. **Quo Vadis, BEC – Number 5?**, Bad Honnef, 15-19 December 2014
From Topological Bloch Bands to Long-Range Interacting Rydberg Atoms

111. **University of Tokyo - LMU Meeting**, Mainz, 27-28 October 2014
Realizing and Probing Topological Bloch Bands with Ultracold Atoms

110. **CIFAR-MPG Quantum Materials Meeting**, Stuttgart, 16 October 2014
Realizing and Probing Topological Bloch Bands with Ultracold Atoms

109. **Was machen unsere Nachbarn, die Forscher, in Garching**, Garching, 28 September 2014
Experimentieren mit den kältesten Objekten des Universums

108. **Single Atoms Symposium – 60th Birthday D. Meschede**, Bad Honnef, 26 April 2014
From Ultracold to Ultrahot – Probing ‚Higgs' Excitation with Ultracold Atoms

107. **DPG Frühjahrstagung – Dresden**, Dresden, 2 April 2014
Probing Non-Equilibrium Quantum Dynamics at the Single Atom Level

106. **Wissenschaft für jedermann – Deutsches Museum**, Munich,19 February 2014
Experimentieren mit den kältesten Objekten des Universums

105. **Physics Colloquium – FU Berlin**, Berlin, 6 December 2013
Controlling and Exploring Quantum Matter at the Single Atom Level

104. **Physics Colloquium – University of Ulm**, Ulm, 2 December 2013
Controlling and Exploring Quantum Matter at the Single Atom Level

103. **Physics Colloquium – University of Bochum**, Bochum, 11 November 2013
Controlling and Exploring Quantum Matter at the Single Atom Level

102. **Physics Colloquium – University of Duisburg/Essen**, 7 November 2013
Controlling and Exploring Quantum Matter at the Single Atom Level

101. **Körber Lecture – University of Hamburg**, Hamburg, 5 September 2013
Probing Quantum Matter Atom-by-Atom in Artificial Crystals of Light

100. **Physics Colloquium – Karlsruhe Institute of Technology (KIT)**, Karlsruhe, 21 June 2013
Probing and Controlling Quantum Matter at the Single Atom Level

99. **Physics Colloquium – University of Heidelberg**, Heidelberg 14 June, 2013
Probing Quantum Matter at the Single Atom Level

98. **Colloquium – Max Planck Institute of Physics**, Garching, 4 June, 2013
Probing and Controlling Ultracold Quantum Matter under Extreme Conditions

97. **Physics Colloquium – University of Halle**, Halle, 23 May, 2013
Probing and Controlling Quantum Matter at the Single Atom Level

96. **DPG Condensed Matter Spring Meeting**, Regensburg, 11 March 2013,
Probing Topological Bloch Bands using Ultracold Quantum Gases

95. **Physics Colloquium – University of Frankfurt**, Frankfurt, 6 December 2012
Probing and Controlling Quantum Matter at the Single Atom Level

94. **Distinguished Lecturer – Max Planck Institute for the Science of Light**, Erlangen, 22 November 2012
Probing and Controlling Quantum Matter at the Single Atom Level

93. **Grosses Physikalisches Kolloquium - University of Cologne**, Cologne, 16 October 2012
Probing and Controlling Quantum Matter at the Single Atom Level

92. **Physics Colloquium – University of Göttingen**, Göttingen, 9 July 2012
Probing and Controlling Quantum Matter at the Single Atom Level
91. **Quantum Matter from the Nano- to the Macroscale**, Dresden, 25-29 June 2012
Exploring Static and Dynamical Properties of Quantum Gases at the Single Atom Level
90. **WE Heraeus Seminar – Highlights of Quantum Optics**, Bonn, 7-10 May 2012
Probing Quantum Many-Body Systems at the Single Atom Level
89. **CPTS Sektionssitzung – Max-Planck Gesellschaft**, Berlin, 15 February 2012
Observing and Controlling Quantum Matter at the Single Atom Level
88. **CFEL Seminar**, Hamburg, 20 January 2012
Observing and Controlling Quantum Matter at the Single Atom Level
87. **Workshop on Engineering and Control of Quantum Systems**, Dresden, 13-14 October 2011
Probing and Controlling Strongly Interacting Quantum Matter
86. **Physics Colloquium – Physikalisch Technische Bundesanstalt (PTB) Braunschweig**, 6 October 2011
Probing and Controlling Strongly Interacting Quantum Matter at the Single Atom Level
85. **Coherence and Decoherence at Ultracold Temperatures**, Garching, 8-9 September 2011
Probing and Controlling Strongly Interacting Quantum Matter at the Single Atom Level
84. **Ruperto Carola Symposium - Pushing Frontiers in Quantum Information with Atoms and Photons**, Heidelberg, 1-3 September 2011
Probing and Controlling Strongly Interacting Quantum Matter
83. **Physics Colloquium – University of Mainz**, Mainz, 12 July 2011
Probing and Controlling Strongly Interacting Quantum Matter
82. **Physics Colloquium – University of Augsburg**, Augsburg, 13 December 2010
Exploring Strongly Correlated Quantum Matter in Artificial Crystals of Light
81. **Laserfest Berlin**, Berlin, 23 March 2010
Exploring Quantum Matter with the Coldest Objects in the Universe
80. **Quantum Criticality and Novel Phases (QCNP) 2009**, Dresden, 2-5 August 2009
Strongly Correlated Fermionic Quantum Gases in Optical Lattices
79. **Physics Colloquium Stuttgart**, Stuttgart, 7 July 2009
Exploring Quantum Matter with Ultracold Atoms in Optical Lattices
78. **FOR635 Workshop**, Bonn, 6-8 July 2009
Controlling Light and Matter with Ultracold Atoms in Optical Lattices
77. Invited Symposium Speaker, **DPG Spring Meeting 2009**, Dresden, 23 March 2009
Strongly Correlated Quantum Matter in Optical Lattices
76. **Joint Physics Colloquium TU Karlsruhe/University of Heidelberg**, Karlsruhe, 30 January 2009
Exploring Quantum Matter with Ultracold Atoms in Artificial Crystals of Light
75. **Physics Colloquium - TU Chemnitz**, Chemnitz, 7 January 2009
Experimentieren mit Ultrakalten Atomen in Künstlichen Kristallen aus Licht
74. **Max-von-Laue Colloquium – Physikalische Gesellschaft zu Berlin**, TU Berlin, 30 October 2008
Experimentieren mit Ultrakalten Atomen in Künstlichen Kristallen aus Licht
73. **DPG Lehrerfortbildung**, Physikzentrum der DPG, 20 October 2008
Experimentieren mit den kältesten Objekten des Universums
72. **SFB/TRR49 Annual Meeting**, Schloss Waldthausen, 25-26 September 2008
Strongly Correlated Fermions and Bose-Fermi Mixtures in Optical Lattices
71. **Colloquium – University of Bremen**, Bremen, 19 June 2008
Experimentieren mit Ultrakalten Atomen in Künstlichen Kristallen aus Licht
70. **Frontiers of Quantum Theory**, Berlin, 28-29 April 2008
Entanglement and Quantum Simulations with Ultracold Atoms
69. **Colloquium – University of Saarbrücken**, Saarbrücken, 17 April 2008
Experimentieren mit Ultrakalten Atomen in Künstlichen Kristallen aus Licht
68. **DPG Meeting Berlin – 150 Years Max-Planck: Physics Today**, Berlin, 27 February, 2008
Atomphysik
67. **DPG Meeting Berlin – Symposium on Quantum Phase Transitions**, Berlin, 25 February 2008
Quantum Phase Transitions with Ultracold Atoms

66. **Colloquium – University of Applied Sciences Fulda**, Fulda, 2 November 2007
Experimentieren mit den kältesten Objekten des Universums
65. **Colloquium – University of Marburg**, Marburg, 2-4 Juli 2007
Experimentieren mit Ultrakalten Atomen in Künstlichen Kristallen aus Licht
64. **Colloquium – University of Erlangen**, Erlangen, 21 Mai 2007
Experimentieren mit Ultrakalten Atomen in Künstlichen Kristallen aus Licht
63. **NMLN Workshop – MPIKS Dresden**, Dresden, 28 March 2007
Strongly Interacting Atoms in Optical Lattices
62. **DFG Rundgespräche**, Bad Honnef, 21-23 February 2007
Strongly Interacting Quantum Gases in Optical Lattices
61. **Colloquium – University of Würzburg**, Würzburg, 11 December 2006
New Light on Quantum Optics
60. **Colloquium – University of Ulm**, Ulm, 27 November 2006
Experimenting with Strongly Interacting Ultracold Quantum Gases
59. **Colloquium – Max-Planck-Institute for Nuclear Physics**, Heidelberg, 9 November 2006
Experimenting with Strongly Interacting Ultracold Quantum Gases
58. **Quo Vadis BEC Workshop**, FU Berlin, 28 October 2006
Experimenting with Strongly Interacting Ultracold Quantum Gases
57. **Kepler Lecture at the University of Tübingen**, Tübingen, 12 July 2006
New Light on Modern Optics
56. **Otto-Stern Colloquium at the University of Hamburg**, Hamburg, 6 July 2006
Exploring Quantum Matter in Artificial Crystals of Light
55. **Public evening lecture with Anton Zeilinger**, Mainz, 30 May 2006
Experimentieren mit den kältesten Objekten des Universums
54. **Colloquium at the University of Bochum**, Bochum, 29 May 2006
Exploring Quantum Matter in Artificial Crystals of Light
53. **Quantum Information in Solid State Based Systems SFB Workshop**, Herrsching, 25 May 2006
Entangling Neutral Atoms in Optical Lattices
52. **Colloquium at the Max-Planck-Institute for Quantum Optics**, Garching, 23 May 2006
Ultracold Quantum Gases in Optical Lattices
51. **Graduate School on Physics of the University of Heidelberg**, Honorary Colloquium, Heidelberg, 20 April 2006
Experimentieren mit ultrakalten Quantengasen
50. **Naturwissenschaftliches Kolleg der Studienstiftung des deutschen Volkes**, Bad Honnef, 2-7 April 2006
Lecture series on ultracold quantum gases
49. **DPG Tagung 2006**, Plenary Lecture, Frankfurt, 15 March 2006
100 Jahre Quantenoptik, von Planck und Einstein zur Quantenoptik heute
48. **Ludwig-Maximilians-University**, Physics Colloquium, Munich, 23 January 2006
Exploring Quantum Matter in Crystals of Light
47. **Wissenschaftssommer Berlin**, Invited Lecture by the DFG for the General Public, Berlin, 20 June 2005
Experimentieren mit den kältesten Objekten des Universums
46. **University of Tübingen**, Physics Colloquium, Tübingen, 25 May 2005
Materiewellen am Aufbruch – Neue Physik mit Bose-Einstein-Kondensaten
45. **Einstein Year of Physics Lectures**, Bonn, 20 May 2005
Bose-Einstein-Kondensation
44. **RWTH Aachen**, Physics Colloquium, Aachen, 9 May 2005
Exploring Quantum Matter in Crystals of Light
43. **Physics on Saturday Morning**, Mainz, 7 May 2005
Experimentieren mit den kältesten Objekten des Universums
42. **New Trends in Nuclear**, Atomic and Molecular Science, Heidelberg, 12-13 March 2005
Exploring Quantum Matter in Optical Lattices
41. **Meeting of the German Physics Society – Plenary Talk**, Berlin, 4 March 2005
From Einsteins Dream to Reality – Experimenting with the Coldest Objects in the Universe
40. **Fritz-Haber-Institut of the Max-Planck-Society – Physics Colloquium**, Berlin, 25 February 2005
Exploring Quantum Matter in Crystals of Light

39. **Colloquium**, Technische Universität Darmstadt, Darmstadt, 26 November 2004
Materiewellen am Aufbruch – neue Physik mit Bose-Einstein-Kondensaten
38. **Colloquium at Graduation Department of Physics**, Mainz University, Mainz, 12 November 2004
Von Einsteins Traum zur Realität – Experimentieren mit den kältesten Objekten des Universums
37. **Inaugural Lecture**, at Mainz University, Mainz, 28 October 2004
Von Einsteins Traum zur Realität – Experimentieren mit den kältesten Objekten des Universums
36. **Physics Colloquium**, University of Dresden, Dresden, 18 October 2004
Seeing Particles beneath the Waves
35. **Workshop on "Quantum Phase Transitions"**, Bad Honnef, 12 October 2004
Exploring strongly correlated quantum matter with ultracold atoms
34. **Workshop on Disordered Ultracold Quantum Gases**, Hannover, 28-28 June 2004
From entanglement interferometry to molecule formation in optical lattices
33. **Physics Colloquium at the University of Bonn**, Bonn, 18 May 2004
Materiewellen am Aufbruch – Neue Physik mit Bose-Einstein-Kondensaten
32. **DFG-SPP1116 Meeting**, Potsdam, 16-17 March 2004
Photoassociation of neutral atoms in optical lattices
31. **Physics Colloquium at GSI Darmstadt**, Darmstadt, 13 January 2004
Seeing the particles beneath the waves – New physics with Bose-Einstein condensates
30. **Physics Colloquium University of Karlsruhe**, Karlsruhe, 12 December 2003
Materiewellen am Aufbruch – Neue Physik mit Bose-Einstein-Kondensaten
29. **Quantum Information Processing Workshop**, Bonn, 13-15 October 2003
Controlled Collisions for Multiparticle Entanglement of Optically Trapped Atoms
28. **Physikalisches Kolloquium Universität Düsseldorf**, Düsseldorf, 3 July 2003
Materiewellen am Aufbruch – Neue Physik mit Bose-Einstein-Kondensaten
27. **Graduiertenkolleg Universität Regensburg**, Regensburg, 22 May 2003
Seeing the Particles beneath the Waves
26. **Forschergruppe Quantengase Meeting in Castle Reisensburg**, Günzburg, 3 April 2003
Controlled Collisions with Neutral Atoms in Optical Lattices
25. **DPG-Spring Meeting Condensed Matter Physics – Eingeladener Hauptvortrag**, Dresden, 26 March 2003
Materiewellen am Aufbruch – Neue Physik mit Bose-Einstein-Kondensaten
24. **Physics Colloquium University of Frankfurt**, Frankfurt, 29 January 2003
Materiewellen am Aufbruch – Neue Physik mit Bose-Einstein-Kondensaten
23. **Physics Colloquium University of Kaiserslautern**, Kaiserslautern, 27 January 2003
Materiewellen am Aufbruch – Neue Physik mit Bose-Einstein-Kondensaten
22. **Physics Colloquium University of Heidelberg**, Heidelberg, 24 January 2003
Materiewellen am Aufbruch – Neue Physik mit Bose-Einstein-Kondensaten
21. **Physics Colloquium Gerhard-Mercator University of Duisburg**, Duisburg, 20 January 2003
Materiewellen am Aufbruch – Neue Physik mit Bose-Einstein-Kondensaten
20. **Max-Planck-Institut für Quantenoptik**, Laserseminar, Garching, 26 November 2002
Seeing the particles beneath the waves – New physics with Bose-Einstein condensates
19. **Interactions in Ultracold Gases: From Atoms to Molecules**, Heidelberg, September 2002
Beyond mean field physics with Bose-Einstein condensates in optical lattices
18. **Physics Colloquium**, TU and LMU Munich, Munich, 15 July 2002
Quantum phase transitions from a superfluid to a Mott insulator in an ultracold gas of atoms
17. **Physics Colloquium**, University of Cologne, Cologne, 11 June 2002
Quantum phase transitions from a superfluid to a Mott insulator in an ultracold gas of atoms
16. **Physics Department**, University of Mainz, Mainz, 14 May 2002
From a weakly interacting Bose gas to a strongly correlated Bose system
15. **Theory Colloquium**, University of Augsburg, Augsburg, 25 April 2002
From a weakly interacting Bose gas to a strongly correlated Bose system
14. **Meeting of the SPP1116 program of the DFG "Interactions in ultracold atomic and molecular gases"**, Bonn, April 2002
Quantum phase transitions from a superfluid to a Mott insulator in an ultracold gas of atoms

13. **Quantum Optics Summer School**, University of Bonn, Bonn, April, 2002
Bose-Einstein condensation
12. **Spring Meeting of the German Physical Society 2002**, Osnabrück, 8 March 2002
Quantum phase transitions from a superfluid to a Mott insulator in an ultracold gas of atoms
11. **"Lattice days in Stuttgart"**, 5. Physikalisches Institut, University of Stuttgart Stuttgart, 28 February 2002
Quantum phase transitions from a superfluid to a Mott insulator in an ultracold gas of atoms
10. **Theoretical Quantum Optics Seminar**, Ludwig-Maximilians University of Munich, Munich, 11 February 2001
Quantum phase transitions from a superfluid to a Mott insulator in an ultracold gas of atoms
9. **Quantum Optics and Atomic Physics Seminar**, University of Heidelberg, Heidelberg, 12 December 2001
Quantum phase transition from a superfluid to a Mott insulator in an ultracold gas of atoms
8. **SFB 407 Colloquium**, University of Hannover, Hannover, 21 November 2001
Quantum phase transition from a superfluid to a Mott insulator
7. **Quantum Optics Summer School**, Universität Bonn, Bonn, 20-21 August 2001
Bose-Einstein condensation
6. **Physics Colloquium of the University of Oldenburg**, Oldenburg, 14 Mai 2001
Bose-Einstein condensation and atom lasers/Experimenting with the coldest objects in the universe
5. **Seminar "Quantum Optics and Spectroscopy"**, Institute for Experimental Physics, University of Innbsruck, Innsbruck, 17 January, 2000
Atom lasers
4. **Advanced training for High School physics teachers organized by the Germany Physical Society "100 years quantum physics"**, Bon, August 2000
Matter Waves
3. **Max-Planck-Institute for Plasma Physics**, Garching, 3 February 2000
Atom lasers
2. **Physics Colloquium of the University of Göttingen**, Göttingen, April 1999
Atom lasers
1. **Spring Meeting of the German Physical Society 1999**, Heidelberg, Invited Main Talk, Heidelberg, March 1999
Atom lasers