

# Quantum Optics and Statistics

Symposium organized by

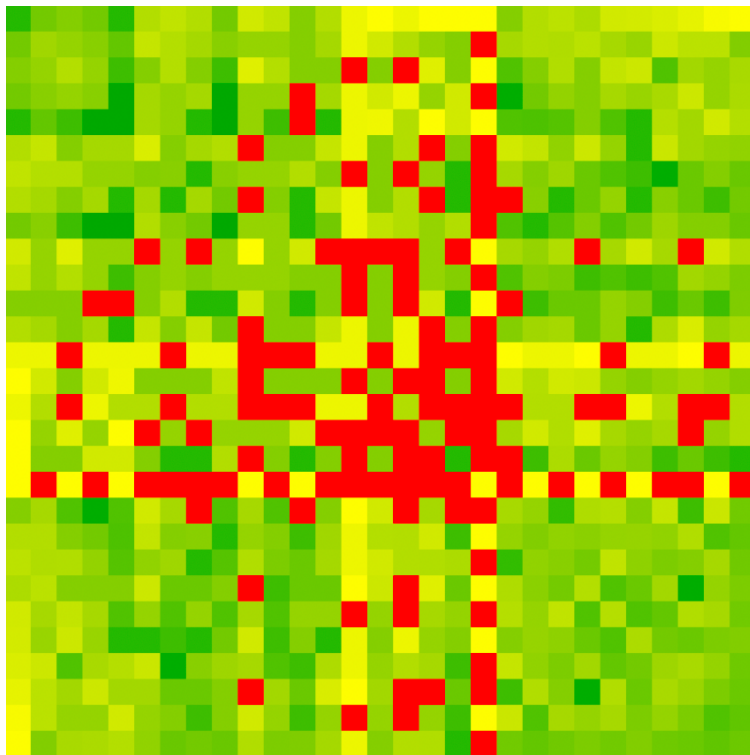
Gabriel Dufour (University of Freiburg, Germany)

Peter Schlagheck (University of Liege, Belgium)

Sandro Wimberger (University of Parma, Italy)

in honor of the 60th birthday of Andreas Buchleitner.

University of Freiburg, December 6th and 7th, 2024.



# Programme

Friday, December 6th

KG I, HS 1221

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|---------------|--|
| 9h00 – 9h15   | opening  |
| 9h15 – 9h45   | Klaus Hornberger : <i>Probing macroscopic quantum superpositions with nanoparticles</i>                                  |
| 9h50 – 10h20  | Giacomo Sorelli : <i>Resolving point sources at the quantum limit</i>  |
| 10h25 – 11h00 | coffee break   |
| 11h00 – 11h30 | Mattia Walschaers : <i>Quantum information processing with light: From boson sampling to mode-intrinsic entanglement</i> |
| 11h35 – 12h05 | Frank Schlawin : <i>Entangled photon spectroscopy – (almost) 10 years later</i>  |
| 12h10 – 14h00 | lunch break  |

Friday, December 6th

KG I, HS 1221

- 14h00 – 14h30 Alberto Rodriguez : *Many-body quantum chaos and dynamical ergodicity for interacting bosons*
- 14h35 – 15h05 Lukas Pausch : *Dissipative phase transition: from qubits to qudits*
- 15h10 – 15h40 Ugo Marzolino : *Relation between quantum metrology and quantum computation*
- 15h45 – 16h20 coffee break & group photo
- 16h20 – 16h50 Angerika Knothe : *Two-dimensional materials for quantum technologies*
- 16h55 – 17h25 Hler Kristjansson : *Higher-order computation and indefinite causal order in quantum physics*
- 17h30 – 18h00 Tobias Binniger : *Active and stable catalysts for water electrolysis: the case of Iridium dioxide*

Saturday, December 7th

Großer Hörsaal

- 9h30 – 10h00 Malte Christopher Tichy : *Scaling-aware rating of count forecasts – a tale of attempted interdisciplinarity*
- 10h05 – 10h35 Tobias Geiger : *Climate Change and its impacts to society*
- 10h40 – 11h10 coffee break
- 11h10 – 11h40 Alexey Ponomarev : *Cutting-edge optics technology for the next generation of lithographic machines*
- 11h45 – 12h15 Tobias Brünner : *Mikrochips für Megtrends – Wie ZEISS die Digitalisierung vorantreibt*
- 12h20 – 12h50 Thomas Wellens : TBA