

Frontiers of Matter Wave Optics

April 6 – 11, Crete, Greece

Topics

- Precision measurements
- Decoherence and dephasing
- Non-classical correlations
- Engineering of matter waves
- Optics for matter waves
- Exotic matter waves
- Non-linear effects
- Propagation in periodic media
- Matter waves in optical cavities
- Optics with quantum degenerate gases

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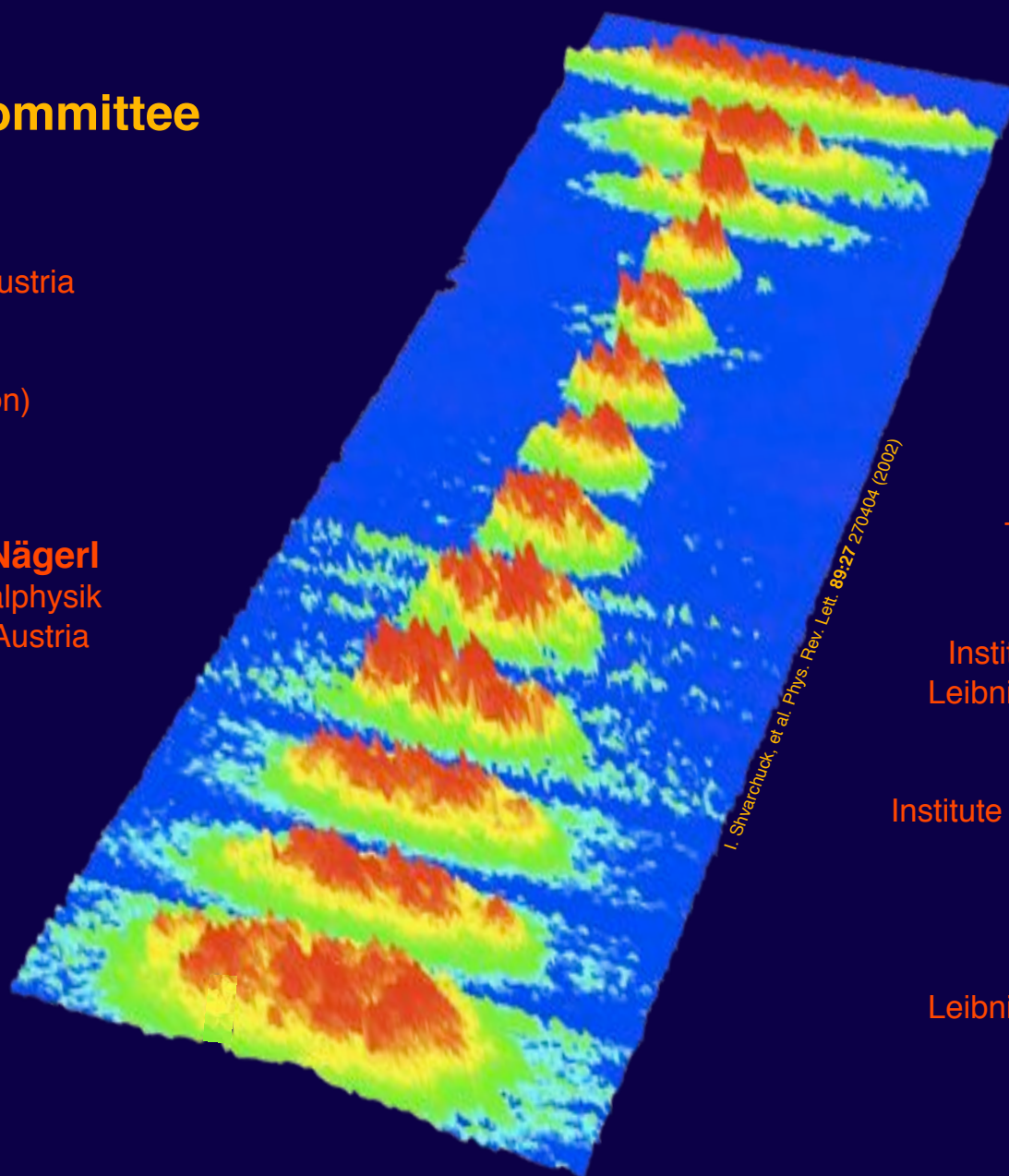
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Scope

Modern matter wave research covers a broad range of truly interdisciplinary fields: Coherence and decoherence studies with electrons, neutrons, atoms and large molecules now interface with light optics, quantum optics, atomic physics, condensed matter physics, physical chemistry and nanotechnology.

The conference will host a fine selection of current research, both from Europe and overseas, spanning the field from the foundations of physics to advanced matter wave applications. There will be ample space for discussions as well as for contributed posters and presentations.

A number of scholarships will be available to outstanding students.