







Innsbruck Physics Colloquium Single Molecules for Quantum Optics Prof. Dr. Ilja Gerhardt

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Single molecules exhibit excellent optical properties at liquid helium temperatures: Their emission is simultaneous bright and of spectral narrow-band nature. At the same time, molecules can be spectrally tailored to a desired optical wavelength.

The speaker will review the attempts to utilize single molecular sources in quantum optics and discuss recent developments in single emitter spectroscopy. This includes manipulations with the Stark effect and our attempts to entangle two single photons and to generate two photons simultaneously.

DK-ALM Pre-Talk: Alexander EbenbichlerAlignment of diffuse interstellar bands

Time & Location: Tuesday, 14.05.2024, 16:30 h, HS C Snacks will be provided in between the pre-talk and the colloquium.



 $|\Psi^{-}\rangle = \frac{1}{\sqrt{2}}(|H\rangle|V\rangle - |V\rangle|H\rangle)$