Physical Sciences Seminar

How to dress radio-frequency photons with tunable momentum

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Host: Johannes Fink

We demonstrate how the combination of oscillating magnetic forces and radio-frequency (rf) pulses endows rf photons with tunable momentum. We observe velocity-selective spin-flip transitions and the associated Doppler shift. Recoil-dressed photons are a promising tool for measurements and quantum simulations, including the realization of gauge potentials and spin-orbit coupling schemes which do not involve optical transitions.

Wednesday, August 7, 2019 11:00am - 12:00pm
IST Austria Campus Heinzel Seminar Room / Office Bldg West (I21.EG.101)

This invitation is valid as a ticket for the IST Shuttle from and to Heiligenstadt Station. Please find a schedule of the IST Shuttle on our webpage: https://ist.ac.at/en/campus/how-to-get-here/ The IST Shuttle bus is marked IST Shuttle (#142) and has the Institute Logo printed on the side.