

# Benjamin Hinrichs

**Title:** On the Non-Relativistic Limit of Quantum Electrodynamics

**Abstract:** We consider the model of a massless bosonic photon field interacting with a fermionic Dirac field of mass  $M$  in the charge  $Q = 1$  sector. A non-relativistic limit of the Hamilton operator is studied. We discuss the rise of the one-particle Pauli-Fierz operator, known from non-relativistic QED, in this limit. The physical interpretation of arising error terms and the idea of proof will shortly be sketched in the end.