

Abstract Submitted
for the MAR15 Meeting of
The American Physical Society

Mach-Zehnder interferometry with periodic voltage pulses¹

PATRICK HOFER, CHRISTIAN FLINDT, University of Geneva — We investigate theoretically a Mach-Zehnder interferometer driven by periodic voltage pulses. We illustrate how the electronic energy distribution of the driven contact influences the visibilities of the Aharonov-Bohm oscillations in the current and in the noise. For the current, the visibility factorizes in analogy to the static case and we find a universality at path-length differences equal to multiples of the spacing between the voltage pulses. In the noise oscillations, we find additional features which are characteristic to time-dependent transport. Finite electronic temperatures are found to have a qualitatively different influence on the current and the noise.

¹The work was funded by the Swiss NSF

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Date submitted: 24 Oct 2014

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