

Publication**Aharonov-Bohm-type oscillations of thermopower in a quantum-dot ring geometry****JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)****ID** 102831**Author(s)** Blanter, YM; Bruder, C; Fazio, R; Schoeller, H**Author(s) at UniBasel** [Bruder, Christoph](#) ;**Year** 1997**Title** Aharonov-Bohm-type oscillations of thermopower in a quantum-dot ring geometry**Journal** Physical Review B**Volume** 55**Number** 7**Pages / Article-Number** 4069-4072

We investigate Aharonov-Bohm-type oscillations of the thermopower of a quantum dot embedded in a ring for the case when the interaction between electrons can be neglected. The thermopower is shown to be strongly A_{ex} dependent, and typically the amplitude of oscillations exceeds the background value. It is also shown to be essentially dependent on the phase of the scattering matrix, which is determined by the experimental geometry and is not known in the given experiment. Two procedures to compare theory and experiment are proposed.

Publisher American Physical Society**ISSN/ISBN** 2469-9950 ; 2469-9969**edoc-URL** <http://edoc.unibas.ch/45456/>**Full Text on edoc** No;**Digital Object Identifier DOI** 10.1103/PhysRevB.55.4069**ISI-Number** 1997WK49300018**Document type (ISI)** Article