



## IRTG-Seminar

### Prof. Dr. Ralf Schuetzhold

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### “Fundamental quantum effects in the laboratory?”

There are several fundamental predictions of quantum field theory which have so far eluded a direct experimental verification, such as the Unruh effect, Hawking radiation, the Sauter-Schwinger effect etc.

After a brief introduction to a selection of these effects, prospects for possible experimental realizations (directly or indirectly) will be discussed. Finally, the concept of partner particles -- which is inherent in all these effects -- will be discussed.

**Tuesday, April 24, 2018, 6:00 p.m., HS II,  
Physics high rise, Hermann-Herder-Str. 3**