



## PHYSIKALISCHES KOLLOQUIUM

*Referent:* **Prof. Dr. Ralf Schützhold**  
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*Thema:* **Fundamental quantum effects in the laboratory?** (Antrittsvorlesung)

*Zeit und Ort:* Dienstag, 27.11.2018, 16:40 Uhr  
Rechnagel-Bau, Hörsaal REC/C213, Haeckelstr. 3

*Leiter:* Dekan der Fakultät Physik Prof. Dr. Roland Ketzmerick

*Kurzfassung:* There are several fundamental predictions of quantum field theory, such as Hawking radiation, the Sauter-Schwinger effect, or Unruh radiation, which have so far eluded a direct experimental verification. After a brief introduction into the basic physics of these effects, we shall discuss prospects of their observation, either directly or indirectly, e.g., via suitable analogues.

*Biographie:*

- 1992 Abitur (TU Chemnitz)
- 1998 Diploma in physics, 2001 PhD in physics (TU Dresden)
- 2001-2003 Postdoc (Feodor-Lynen fellow) with W.G. Unruh at UBC (Canada)
- 2003-2008 Emmy-Noether fellow (TU Dresden), 2007 Habilitation
- 2008-2018 Full professor (University of Duisburg-Essen)
- since 2018 Director position at HZDR/professor at TU Dresden

