

## **Theoriekolloquium**

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Am **11. April 2019** um **14.15 Uhr** in **W2 1-143** hält

**Herr Dr. Eugen Radu (Aveiro)**

einen Vortrag mit dem Titel

### **Black holes and scalar fields**

With the recent discovery of the Higgs boson and the detection of the gravitational waves, the study of scalar fields and of black holes became important directions of research in modern physics.

In this talk we shall start by reviewing some basic aspects of these two seemingly unconnected subjects. The tension between the existence of black holes and the presence of non-trivial scalar field configurations, as encoded in the black hole 'no hair' conjecture, will also be discussed.

Finally, we shall review a number of recent results which circumvent the 'no hair' conjecture, allowing for black holes surrounded by 'scalar clouds', with potential relevance in astrophysics.

Interessierte sind herzlich eingeladen.

gez. Prof. Dr. Jutta Kunz