



Contribution ID: 653

Type: **Talk in the parallel session**

General Relativity in the Theater of the Absurd

Thursday, 8 July 2021 17:20 (25 minutes)

Einstein's theory of space-time curvature and its impressive astrophysical and philosophical consequences, not only since the experimental evidence of gravitational waves and the first image of a black hole, represent milestones in human knowledge, and the presentation of these insights in a popular scientific manner is an important undertaking. How can bizarre concepts such as the curvature of space-time or the event horizon of a black hole be understood? Learned things that seem outlandish to personal experience are quickly forgotten. Simple stories and familiar images can make it easier for the layperson to retain what they have learned, and one can also use absurd analogies to confront the audience with the facts of general relativity. For example, the different phases of a neutron star collision can be illustrated as an omnium-gatherum of different ballroom dances [1], or the essential properties of black holes are reflected in the architecture of the German Reichstag building [2].

[1] <https://itp.uni-frankfurt.de/~harauske/TanzNeutronensterne.mp4>

[2] Harauske, Matthias. "Black holes and the german reichstag." *Physics World* 18.10 (2005): 64.

Primary author: HANAUSKE, Matthias (Goethe University Frankfurt, Institute for Theoretical Physics)

Presenter: HANAUSKE, Matthias (Goethe University Frankfurt, Institute for Theoretical Physics)

Session Classification: Teaching Einsteinian Physics to School Students

Track Classification: Education: Teaching Einsteinian Physics to School Students