

Student Talks

Possible Topics

1) Analogue Gravity:

Nature 611, 260 (2022)

2) Dark Matter:

arXiv:2303.02049

3) Jets from Black Holes:

<https://pro-physik.de/nachrichten/gigantische-plasmastrahlen-eines-schwarzen-lochs>

4) Mega structures in Universe

<https://pro-physik.de/nachrichten/neue-karte-des-universums-enthaelt-mega-strukturen>

5) Orbital precession of stars in galactic center:

<https://arxiv.org/pdf/2304.11458.pdf>

6) Interaction between gravitational waves and trapped Bose-Einstein condensates

arXiv:2411.15874

7) Quantization of gravitational waves:

Claus Kiefer, Quantum Gravity, Oxford University Press (2007)

8) Cosmology:

a) Robertson-Walker metric

b) Cosmological standard model

Organizational Matters

1) Application via Email until December 20, 2024: First come first served → Topic

2) Student talk program available on Januar 5, 2025

3) Student talks will take place in the second half of January 2025