

# Foundations and Applications of General Relativity

## MASS Summer School - Bremen 2023, July 17<sup>th</sup> - 21<sup>st</sup>

	Monday	Tuesday	Wednesday	Thursday	Friday
09:00 - 10:30	Lecture I Philipp	Lecture II Giulini	Lecture V Perlick	Lecture V Perlick	Lecture X Lämmerzahl
10:30 - 11:00	Coffee break				
11:00 - 12:30	Lecture II Giulini	Lecture IV Dittus	Lecture VI Tsupko	Lecture VIII Scharringhausen	Lecture XI Leftley
12:30 - 14:00	Lunch break				
14:00 - 16:00	Lecture III Merkle	Excursion I: <a href="#">OHB</a>	Lecture VII Ladstätter	Lecture IX Ilić	Lecture XII Reese
16:00 - 16:30	Coffee break				
16:30 - 18:00	Discussion	Discussion	Excursion II: <a href="#">DLR</a>	Excursion III: <a href="#">ZARM</a>	Discussion
18:00 - .....	barbecue	City Tour			

**Dennis Philipp** (Lecture I): GNSS

**Domenico Giulini** (Lecture II, 2): first talk: Advanced Special Relativity, second talk: Basics of Relativistic Cosmology

**Fritz Merkle** (Lecture III): How much astrophysics is in our daily life?

**Hansjörg Dittus** (Lecture IV): Quantum sensors in space

**Volker Perlick** (Lecture V, 2): Gravitational lensing in the presence of a plasma

**Oleg Tsupko** (Lecture VI, 1): Black hole shadow and photon rings: Analytical studies

**Annette Ladstätter-Weissenmayer** (Lecture VII): Remote sensing

**Marco Scharringhausen** (Lecture VIII): Exo-planets

**Dragana Ilić** (Lecture IX): AGN

**Claus Lämmerzahl** (Lecture X, 1): The concepts of quantum mechanics [online]

**James Leftley** (Lecture XI, 1): AGN

**Carsten Reese** (Lecture XII): tbd

may be subject to changes