

2019 Lecture Week 1, March 3-8 **Timetable**

	Groups	3 (Sun)	4 (Mon)	5 (Tue)	6 (Wed)	7 (Thu)	8 (Fri)
9:00-	All		Exp.1: GWs and their effect  <b>K. Danzmann</b>	Rela.Geo.1: Height Systems and Clock Measurements I  <b>J.Müller</b>	Exp.3: Ifo and DC Readout  <b>B. Willke</b>	Exp.4: Optical Resonators  <b>H. Lück</b>	Exp.5: Info Noise Sources  <b>H. Lück</b>
10:30-	All	Coffee Break					
11:00-	Parallel session for PhD Students		Rel-a.1: Special Relativity Reminder  <b>A. Shoom</b>	Rel-a.2: Tensor Analysis in Special Relativity I  <b>J. Steinhoff</b>	Rel-a.3: Tensor Analysis in Special Relativity II  <b>J. Steinhoff</b>	Rel-a.4: Curved Spacetimes I  <b>A. Shoom</b>	Rel-a.5: Curved Spacetimes II  <b>A. Shoom</b>
	Parallel session for Postdocs		Rel-b.1: Galileo satellites, clocks, gravitational redshift and further clock effects  <b>S. Herrmann</b>	Rel-b.2: Neutron stars  <b>J. Kunz</b>	Rel-b.3: Quasi normal modes  <b>J.L. Blazquez</b>	Rel-b.4: Charged perfect fluids near Black Holes  <b>A. Trova</b>	Rel-b.5: Gravitational lensing in the presence of plasma  <b>V. Perlick</b>
12:30-	All	Coffee Break					
14:00-	All		Exp.2: Modulation  <b>B. Willke</b>	Rela.Geo.2: Towards general relativistic geodesy  <b>C. Lämmerzahl</b>	Rela.Geo.3: Space gravity observations for ocean climate studies  <b>M.Weigelt</b>	Rela.Geo.4: Attitude Determination and Control  <b>J.Große</b>	Departure and Excursion to ZARM Bremen
15:30-	All	Coffee Break					
16:00-	All		Q&A, Students and Postdocs Presentation	Q&A, Students and Postdocs Presentation	Q&A, Students and Postdocs Presentation	Q&A, Students and Postdocs Presentation	
18:00-	All	Arrival	Break				
19:00-	All	Dinner Break and social hours					



Contents of Relativistic Geodesy lectures:

**Lecture 1 : Height Systems and Clock Measurements (Jürgen Müller)**

- Classical height system and Geoid
- Clock measurements on height systems

**Lecture 2 : Towards general relativistic geodesy (Claus Lämmerzahl)**

- A relativistic geodesy with optical clocks and fibre networks
- The notion(s) of geoid and of height
- Geodetic network with the combination of clocks, fibers and GNSS

**Lecture 3: Space gravity observations for ocean climate studies (Matthias Weigelt)**

- The Earth's climate
- Ocean mass changes – the GRACE mission and other observing systems
- The Earth's geoid and the ocean mean dynamic topography
- Observation with future space gravity

**Lecture 4: Attitude Determination and Control (Jens Große)**

- Disturbances on space crafts
- Passive and active attitude control
- Inertial sensors
- Drag-free operation