Course Plan: PHY-765 - Gravitational Lensing (GL)

version: July 10, 2018

Lecture plan subject to change. See https://kasperschmidt.github.io/teaching/SS18_GravLens_UP765 for details.

Week Date	Lecture (Wed.'s 08:15-09:05)	Exercise/Seminar (Wed.'s 09:10-09:55)	Location
1 April 11	**Slides 01** Intro & Early days of GL	**Worksheet 01** (Literature searches and first lenses)	2.28.2.011
2 April 18	**Slides 02** Light deflection and basic GL geometry	**Worksheet 02** (Select poster topic for presentation)	2.28.2.011
3 April 25	**Slides 03** The lens equation	**Worksheet 03**	2.28.2.011
4 May 2	**Slides 04** Multiple images	**Worksheet 04** (Poster presentations)	2.28.2.011
5 May 9	**Slides 05** Time delays	**Worksheet 05** ("Journal club" allocation 1)	2.28.2.011
6 May 16	**Slides 06** Magnifying sources	**Worksheet 06** (Present "journal club" papers 1) (Essay allocation)	2.28.2.011
7 May 23	**Slides 07** Finding (strong) gravitational lenses	**Worksheet 07**	2.28.2.011
8 May 30	**Slides 08** Microlensing	**Worksheet 08** ("Journal club" allocation 2)	2.28.2.011
9 June 6	**Slides 09** Searching for extrasolar planets with GL	**Worksheet 09** (Present "journal club" papers 2)	2.28.2.011
10 June 13	**Slides 10** Modeling Gravitational Lenses	**Worksheet 10** (Essay review allocation)	2.28.2.011
11 June 20	No lecture and seminar. Compensated by 5-10 minutes longer days weeks 3-15		N/A
12 June 27	**Slides 12** Weak GL	**Worksheet 12** (Essay review feedback) (Select topic for 'talk')	2.28.2.011
13 July 4	**Slides 13** Cosmic Shear and the CMB	**Worksheet 13** (Science presentations w. slides) (Select and start preparing outreach)	2.28.2.011
14 July 11	**Slides 14** The future of GL	**Worksheet 14** (Finish outreach)	2.28.2.011
15 July 18	Slides 15 Summary, loose ends and Q&A	Worksheet 15 (Outreach presentations)	2.28.2.011

Potential Examination:
45 min. oral examination
20 min presentation w. topics known in advance + Q&A.