

Advanced Seminar “Ultracold Quantum Gases”, Winter term 2019/20

Friday, 8:30 – 10:00, Room 43.2.102 (Uni West)

Talks and participants

<b>No.</b>	<b>Topic</b>	<b>Name</b>	<b>Tutor</b>
1	<b><i>Quantum Walk</i></b>	Konrad Bernd	Wolfgang Limmer
2	<b><i>Rydberg atoms</i></b>	Bschorr Fabian	Shinsuke Haze
3	<b><i>Scattering length and Feshbach resonance</i></b>		Simon Rupp
4	<b><i>Optical lattices and Hubbard model</i></b>	Spohn Kai	Wolfgang Limmer
5	<b><i>Ultracold Fermi gases</i></b>		Manuel Jäger
6	<b><i>Matter-wave interferometry and gravitational measurements</i></b>	Schimmel Jan	Shinsuke Haze
7	<b><i>Bragg diffraction with cold atoms</i></b>	Listunov Paul	Manuel Jäger
8	<b><i>Nonlinear atom optics, 4-wave mixing, and solitons</i></b>		Shinsuke Haze

Preliminary discussion:

Friday, 18th of October 2019, 08:00 h a.m., in 43.2.102

## Time table :

Friday 8:30 -10:00 in 43.2.102

Week	Date	
42	18.10.2019	<b>First meeting, assignment of talks</b>
43	25.10.2019	(self-study)
44	01.11.2019	(self-study)
45	08.11.2019	<b>Discussion about basics:</b> Atom-light interaction, laser and evaporative cooling, atom traps, Bose-Einstein condensation (see: Literature)
46	15.11.2019	---
47	22.11.2019	---
48	29.11.2019	<b>Talks 1 + 2</b>
49	06.12.2019	<b>Talks 3 + 4</b>
50	13.12.2019	<b>Talks 5 + 6</b>
51	20.12.2019	<b>Talks 7 + 8</b>
52	27.12.2019	---
01	03.01.2020	---
02	10.01.2020	---
03	17.01.2020	---
04	24.01.2020	---
05	31.01.2020	---
06	07.02.2020	---
07	14.02.2020	--- 15.02.2020 : End of semester