

Philosophie und Physik von Raum und Zeit

Holger Leuz, Johannes Kleiner

SoSe 2014

Mittwoch, 16 Uhr, Vielberth-Geb. 0.05

- | | Betreuer: |
|--|-----------|
| 1. Organisation u. Hinführung | |
| 09.04.2014 Referenten: JK, HL | |
| 2. Newton's Theorie | HL |
| 16.04.2014 Referenten: Melanie Braun und Martin Gall | |
| <u>Literatur:</u> [Mau12, Ch. 1-3] | |
| <u>Vorbereitung:</u> [Fri83, Ch. 1] | |
| 3. Space Time Theories | JK |
| 23.04.2014 Referent: JK | |
| <u>Literatur:</u> [Fri83, Ch. 2] | |
| 4. Spezielle Relativitätstheorie 1 | HL |
| 30.04.2014 Referent: JK | |
| <u>Literatur:</u> [Fri83, Ch. 5] | |
| <u>Vorbereitung:</u> [Mau12, Ch. 4] | |
| 5. Spezielle Relativitätstheorie 2 | HL |
| 07.05.2014 Referent: HL | |
| <u>Literatur:</u> [Fri83, Ch. 5], [Mau12, Ch. 5] | |
| 6. Relationismus | HL |
| 14.05.2014 Referent: Wolf Last | |
| <u>Literatur:</u> [Fri83, Ch. 6] | |
| 7. Allgemeine Relativitätstheorie 1 | JK |
| 21.05.2014 Referent: Arnold Pöpl | |
| <u>Literatur:</u> [Ger78] | |
| <u>Vorbereitung:</u> [Mau12, Ch. 6] | |
| 8. Allgemeine Relativitätstheorie 2 | JK |
| 28.05.2014 Referent: JK | |
| <u>Literatur:</u> [Fri83, Ch. 5], [Nor14] (evt.: [HH09]) | |
| 9. Kant's Views on Space and Time | HL |
| 04.06.2014 Referent: HL | |
| <u>Literatur:</u> [Jan12], [tba] | |

10. Konventionalismus 1 HL
11.06.2014 Referent: Alexander Djamali
Literatur: [Sk177], [Fri83, Ch. 7]
11. Kann Physik die Richtung der Zeit erklären? JK
Teil 1: Entropie und die Richtung der Zeit
18.06.2014 Referent: Michael Schmid
Literatur: [Cal11]
12. Kann Physik die Richtung der Zeit erklären? JK
Teil 2: A- und B-Zeit, Block-Universum und Präsentismus
25.06.2014 Referenten: HL, JK
Literatur: [Mar14], [tba]
13. Konventionalismus 2 HL
02.07.2014 Referent: HL
Literatur: [Sk177], [Fri83, Ch. 7]
14. Space and Time in Quantum Gravity JK
09.07.2014 Referent: Thomas Lottner
Literatur: [HW12]

Bibliography

- [Cal11] Craig Callender. Thermodynamic asymmetry in time. In Edward N. Zalta, editor, *The Stanford Encyclopedia of Philosophy*. Fall 2011 edition, 2011.
- [Fri83] *Foundations of Space-Time Theories*. Princeton University Press, 1983.
- [Ger78] Robert Geroch. *General Relativity from A to B*. University of Chicago Press, 1978.
- [HH09] Nick Huggett and Carl Hoefer. Absolute and relational theories of space and motion. In Edward N. Zalta, editor, *The Stanford Encyclopedia of Philosophy*. Fall 2009 edition, 2009.
- [HW12] N. Huggett and C. Wuthrich. Emergent spacetime and empirical (in)coherence. *ArXiv e-prints*, June 2012.
- [Jan12] Andrew Janiak. Kant's views on space and time. In Edward N. Zalta, editor, *The Stanford Encyclopedia of Philosophy*. Winter 2012 edition, 2012.
- [Mar14] Ned Markosian. Time. In Edward N. Zalta, editor, *The Stanford Encyclopedia of Philosophy*. Spring 2014 edition, 2014.
- [Mau12] *Philosophy of Physics: Space and Time*. Princeton University Press, 2012.
- [Nor14] John D. Norton. The hole argument. In Edward N. Zalta, editor, *The Stanford Encyclopedia of Philosophy*. Spring 2014 edition, 2014.
- [Skl77] Lawrence Sklar. *Space, Time and Spacetime*. University of California Press, 1977.