Vorlesung "Theorie elastischer Wellen 2" SS 2019 Daniel Köhn and Thomas Meier

April 7, 2019

| Termin | Inhalt | Dozent |
|----------------|---|----------|
| Mo, 08.04.2019 | Overview and introduction to seismic modelling | D. Köhn |
| Do, 11.04.2019 | Short intro to Python and Jupyter notebooks | D. Köhn |
| Mo, 15.04.2019 | Review of elastic equations of motion | D. Köhn |
| Do, 18.04.2019 | 2D/1D acoustic/elastic medium approximations | D. Köhn |
| Mo, 22.04.2019 | Ostermontag (KEINE Vorlesung) | - |
| Do, 25.04.2019 | Analytical solutions for homogeneous acoustic medium | D. Köhn |
| Mo, 29.04.2019 | Mesh generation | D. Köhn |
| Do, 02.05.2019 | Introduction to the Finite Difference Method | D. Köhn |
| Mo, 06.05.2019 | Stability, dispersion and accuracy of FD operators | D. Köhn |
| Do, 09.05.2019 | From 1D to 2D acoustic FD modelling | D. Köhn |
| Mo, 13.05.2019 | Performance optimization of 2D acoustic FD code | D. Köhn |
| Do, 16.05.2019 | Numerical stability, dispersion and anisotropy of 2D acoustic FD code | D. Köhn |
| Mo, 20.05.2019 | Modelling of 2D heterogeneous acoustic media | D. Köhn |
| Do, 23.05.2019 | Staggered grid FD discretization of the 2D SH problem | D. Köhn |
| Mo, 27.05.2019 | Implementation of 2D SH FD code | D. Köhn |
| Do, 30.05.2019 | Himmelfahrt (KEINE Vorlesung) | - |
| Mo, 03.06.2019 | Love wave propagation in the Fossa Carolina canal | D. Köhn |
| Do, 06.06.2019 | Global SH wave propagation in planets and moons | D. Köhn |
| Mo, 10.06.2019 | Pfingstmontag (KEINE Vorlesung) | _ |
| Do, 13.06.2019 | Exkursionswoche (KEINE Vorlesung) | - |
| Mo, 17.06.2019 | Staggered grid FD discretization of the 2D axisymmetric SH problem | D. Köhn |
| Do, 20.06.2019 | SH-FD modelling in earth, moon, and Jupiter moon Ganymede | D. Köhn |
| Mo, 24.06.2019 | Sensitivity kernels I | T. Meier |
| Do, 27.06.2019 | Sensitivity kernels II | T. Meier |
| Mo, 01.07.2019 | Theory of visco-elastic wave propagation I | D. Köhn |
| Do, 04.07.2019 | Theory of visco-elastic wave propagation II | D. Köhn |
| Mo, 08.07.2019 | 1D visco-elastic SH-FD modelling | D. Köhn |
| Do, 11.07.2018 | Summary | D. Köhn |