# Program Multi-Time Spring School (April 10-12, 2019)

| **Wednesday, April 10** | **Thursday, April 11** | **Friday, April 12** |
|---|---|---|
| | 9:00-10:35 **Lecture 3** | 9:00-10:35 **Lecture 6** |
| | 10:35-11:00 Coffee break | 10:35-11:00 Coffee break |
| | 11:00-12:30 **Lecture 4** | 11:00-12:30 **Lecture 7** |
| 12:30-13:45 Lunch break | 12:30-13:45 Lunch break | 12:30-13:45 Lunch break |
| 13:45-14:15 Arrival, welcome address | 13:45-15:30 **Exercise session 1** | 13:45-15:30 **Exercise session 2** |
| 14:15-15:45: **Lecture 1** | 15:30-15:50 Coffee break | 15:30-16:00 **Short talk 2** |
| 15:45-16:05 Coffee break | 15:50-16:20 **Short talk 1** | 16:00-16:20 Coffee break and farewell |
| 16:05-17:50 **Lecture 2** | 16:25-17:55 **Lecture 5** | |
| 18:30 **Dinner 1 (Zum Alten Fritz)** | 18:45 **Dinner 2 (Neckarmüller)** | |

**Topics for lectures**

1. Introduction and overview (Roderich Tumulka)
2. Consistency conditions and interaction potentials (Sören Petrat)
3. Relativistic point interactions in 1+1 dimensions (Matthias Lienert)
4. Multi-time formulation of QFTs part 1: basics and first examples (Sören Petrat)
5. Multi-time formulation of QFTs part 2: further topics (Sören Petrat) and interior-boundary conditions for multi-time wave functions (Matthias Lienert)
6. Born's rule for arbitrary Cauchy surfaces (Roderich Tumulka)
7. Multi-time integral equations (Matthias Lienert)

**Short talks:** 1. Sascha Lill: "Rigorous proof of existence and uniqueness of dynamics for a multi-time QFT model", 2. Markus Nöth: "Two Dirac Particles Interacting Directly"

**Version from:** April 8, 2019