

Preliminary program of the course “Gravitational Wave Progenitors”

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1. Gravitational waves for dummies and observational facts
2. Single massive star evolution (a quick summary)
3. Supernova explosions and black hole mass
4. Binary evolution I
5. Binary evolution II
6. Dynamics of black hole binaries I
7. Dynamics of black hole binaries II
8. Population synthesis codes
9. Exercises with population-synthesis codes I
10. Exercises with population-synthesis codes II
11. Discussion of results of exercises with population-synthesis codes
12. wrap-up: what we know what still to be discovered

Exam: choice between writing a report about gravitational wave sources or about the population-synthesis simulations