# Dynamics of galaxies

#### **Generalities**

- •Lectures 2x per week
- •4 assignments (30/4; 14/5; 22/5; 11/6; compulsory)
- •2 computer labs (21/5 and 13/6)

#### •Evaluation:

- •written exam including concepts and 1 or 2 exercises similar to assignments;
- computer labs count for the final grade (30%)

## Tentative schedule 2013-2014

- 24/4: Introduction (Sec.1; collisionless systems); Potential theory (Sec.2.1)
- 30/4: Potential Theory (Sec.2.2)
- 30/4 (1.30 pm in Library) First set of problems
- 2/5: Cont. Potential Theory (Sec. 2.3); Orbits (Sec. 3.1)
- 7/5: Orbits of stars (Sec.3.2)
- 9/5: Orbits of stars (Sec.3.3)
- 14/5: Numerical integration of orbits
- 14/5 (1.30pm in Library) Second set of problems
- 16/5: Collisionless Boltzmann Equation (Sec. 4.1, 4.2, 4.3)
- 21/5: First Laboratory: Numerical integration of an orbit
- 22/5: Third set of problems
- 28/5: Cont. CBE (Sec. 4.3, 4.4); Jeans equations (Sec.4.8)
- 30/5: Cont. Jeans Eq. (Sec. 4.9)

### Tentative schedule 2013-2014

- 4/6: Collisions (Sec. 8)
- 6/6: Simulation of a merger: problem + lab (IC)
- 11/6: Spiral structure (Sec.6.1)
- 11/6: Fourth set of problems
- 13/6: Second Laboratory: Accretion of a satellite