

Introduction to geophysics: 25h G. Nolet

Mass of Earth and other planets (Gravity, planetary mass from circular orbit, crust- mantle- and core density, masses and densities of the planets, exoplanets)

- Figure of the Earth (Rotation and Earth flattening, dynamical ellipticity and moment of inertia, geoid and the shape of the Earth)
- Principles of plate tectonics (Heat flux and need for advection, age of the oceans, magnetic anomalies, heat flow as function of age)
- Forces in the earth (Ridge push, slab pull, plate velocities)
- Convection (Viscosity in the earth, postglacial rebound, parametric convection, hotspots and plumes)
- Catastrophes (Earth-crossing asteroids. Catastrophes in geological history: flood basalts or impacts?)