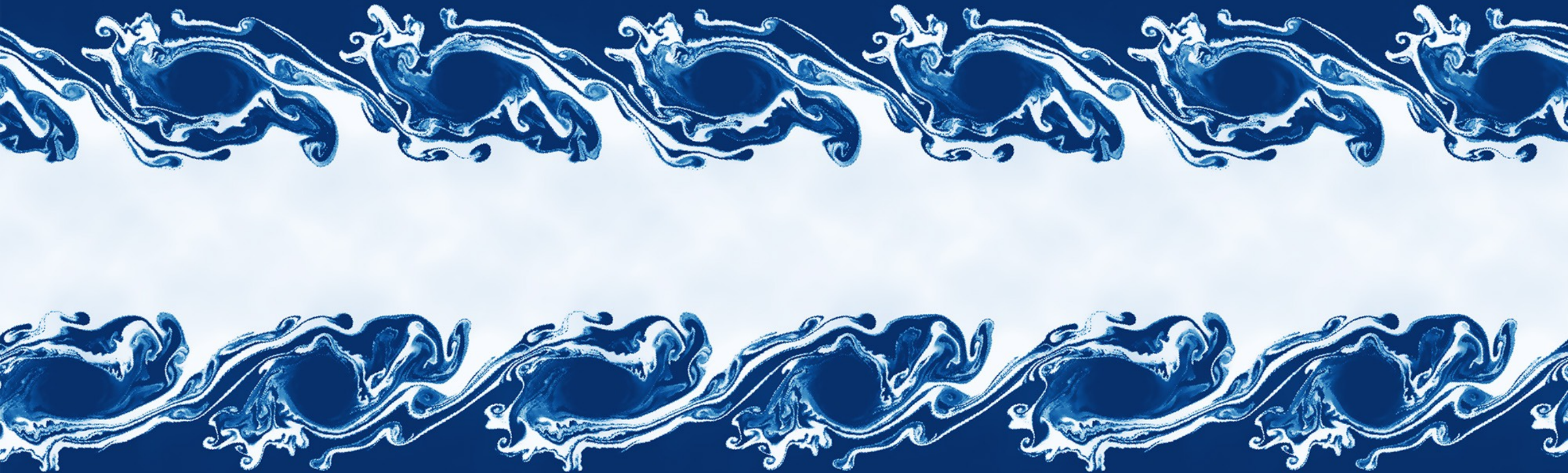


ASTR 670: Interstellar medium and gas dynamics

Prof. Benedikt Diemer



Chapter 1 • Hydrodynamics: from particles to fluids

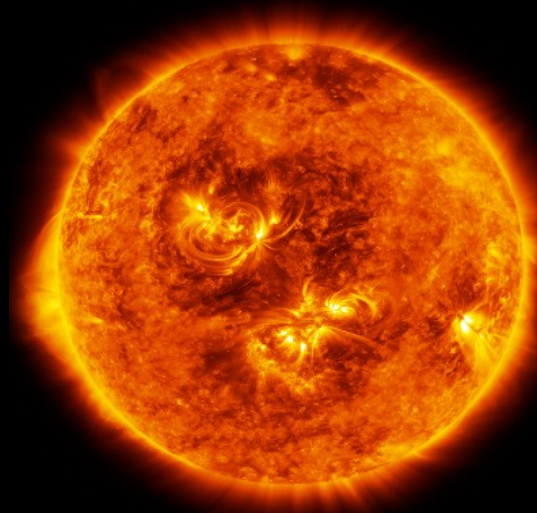
What is hydrodynamics?



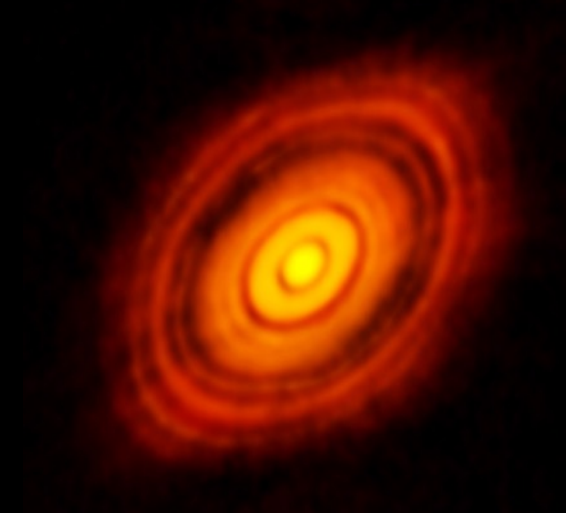
Planet atmospheres



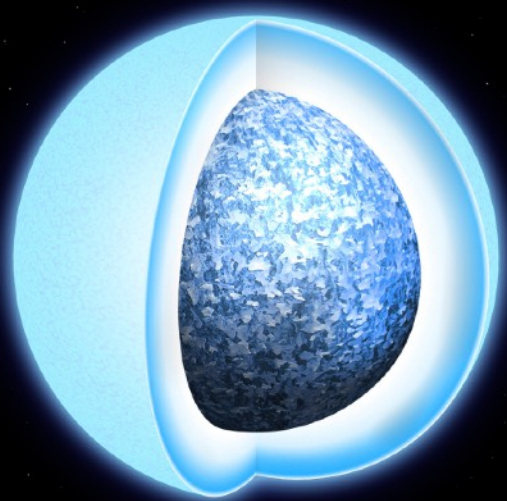
Gas planets



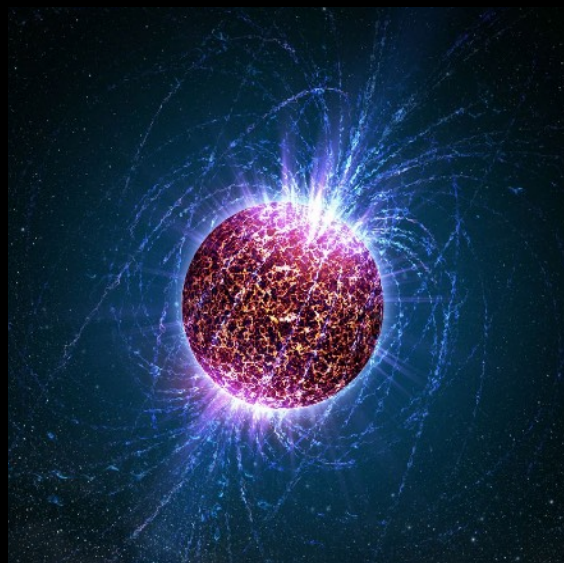
Stars



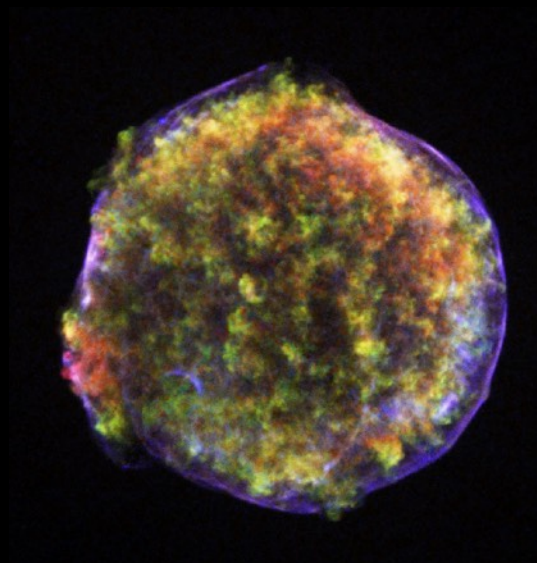
Protoplanetary disks



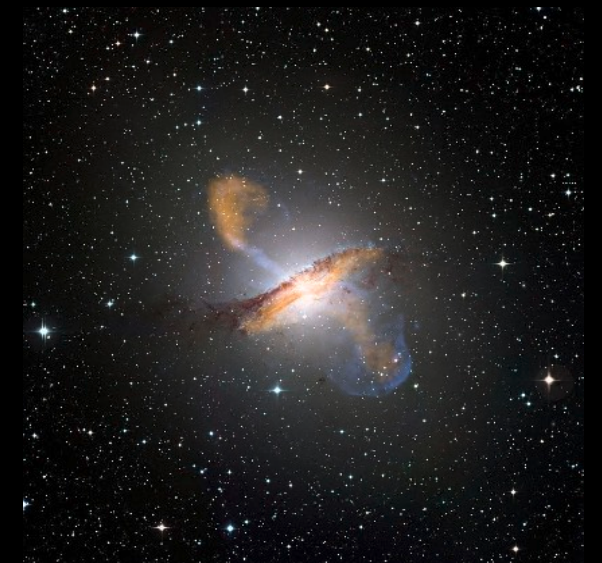
White dwarf



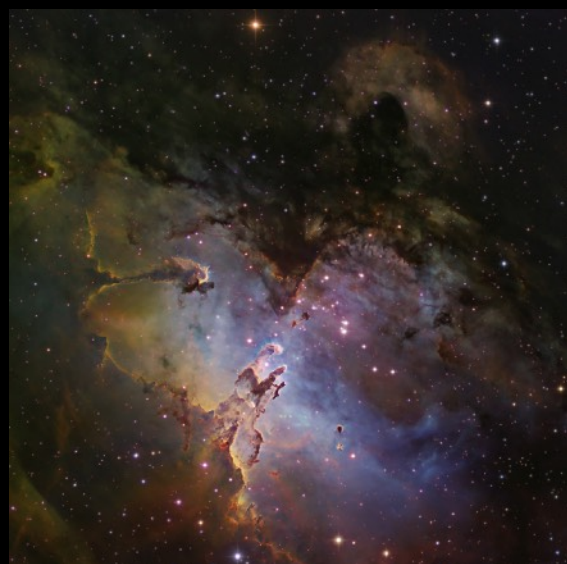
Neutron stars



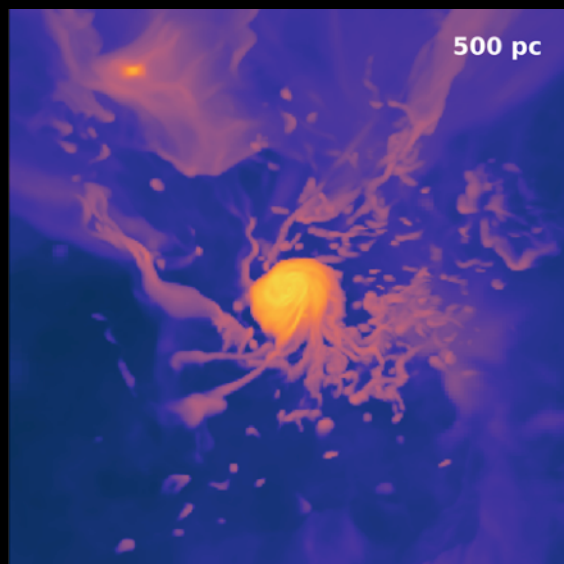
Supernovae



AGN accretion disks



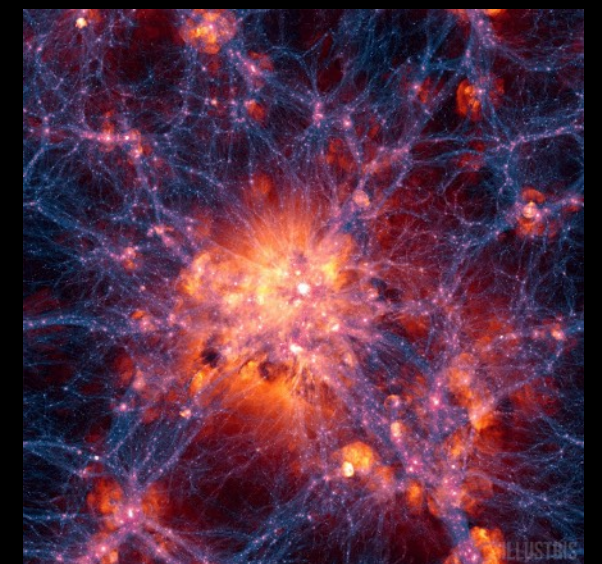
Interstellar medium



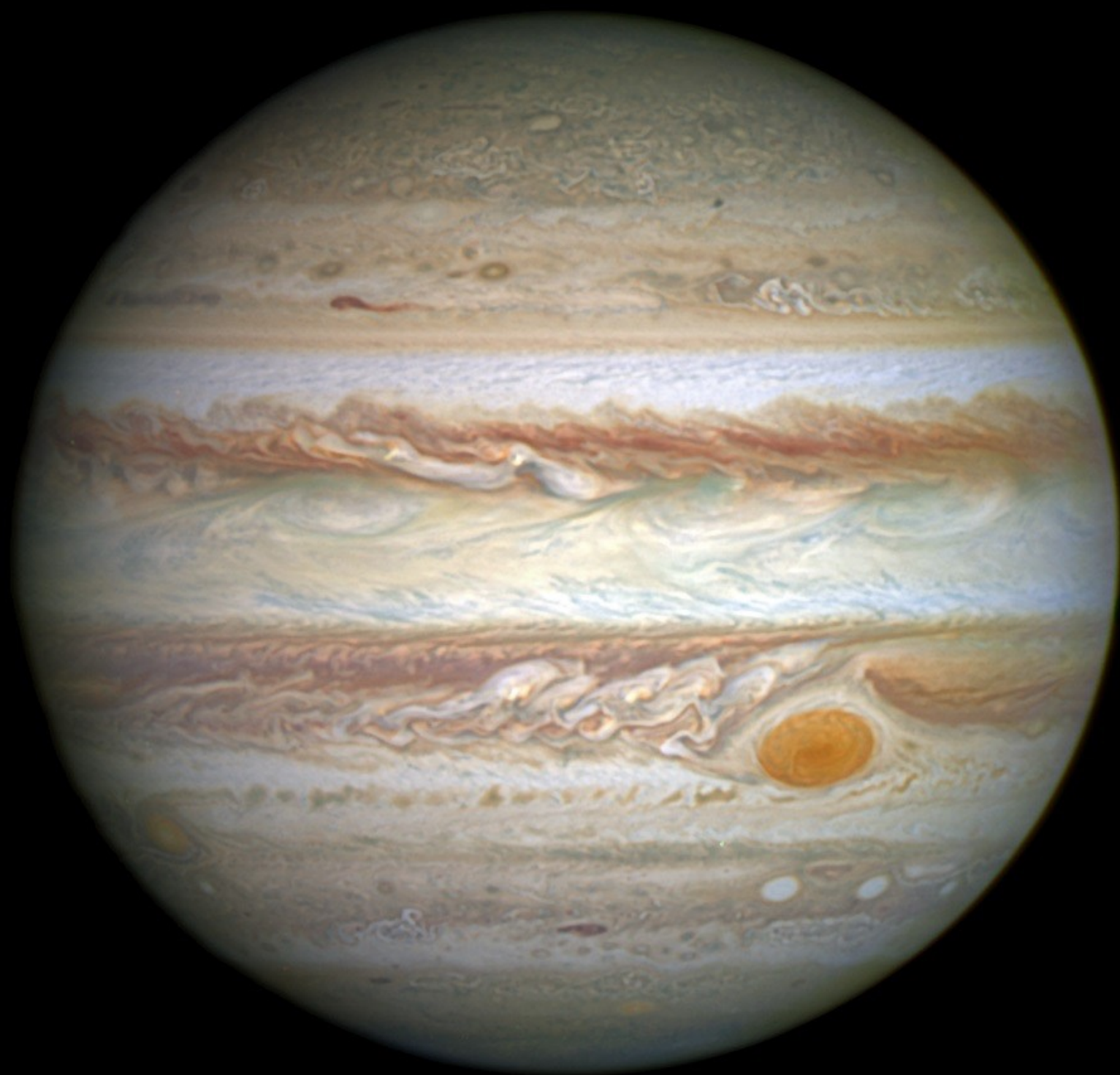
Circumgalactic medium



Intra-cluster medium



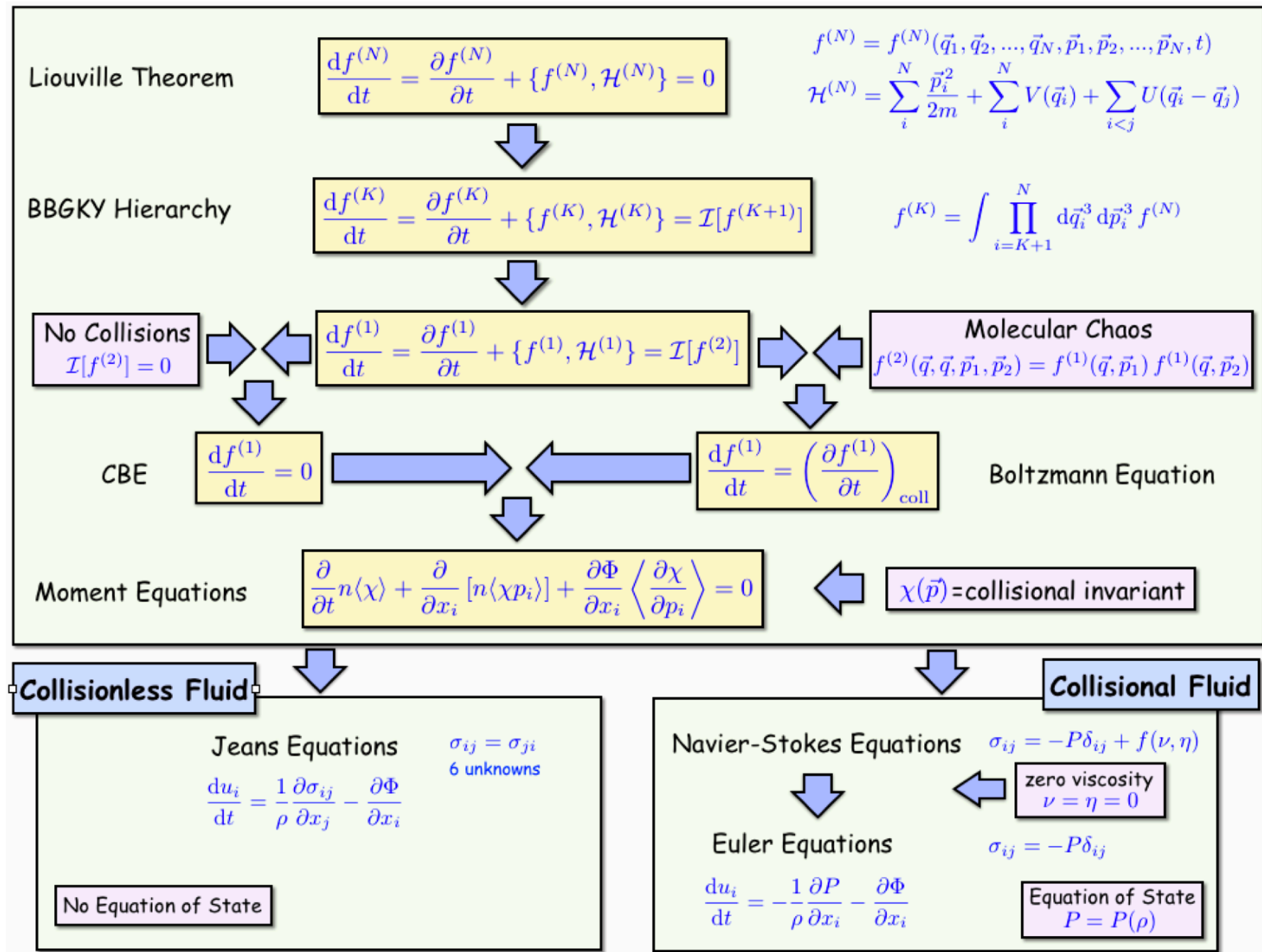
Intergalactic medium





From particles to fluids

From particles to the fluid equations



Reading

- Recommended: CC §1.1-1.2
- Additional: Shu §1, §2