• We study the chemical composition of protoplanetary disk during its formation

• Gas-grain chemical model *Nautilus* (Hersant et al. 2009)
  & Results of hydrodynamical models of protostar and disk formation

• Some results about:
  - Influence of initial conditions (age of the parent cloud) for disk chemistry
  - Impact of the thermal and density history of the formation process for the chemical composition of the disk