

Propositions
accompanying the thesis

Freezing conditions in warm disks

snowlines and their effect on the chemical structure of planet-forming disks

1. HCO^+ and H^{13}CO^+ are good tracers of the water snowline in absence of optically thick dust. (*Chapter 2*)
2. The water snowsurface in the V883 Ori disk is close to vertical. (*Chapter 3*)
3. Knowledge of the gas temperature across a transition disk cavity is needed to infer the mass of the planets that may be carving that cavity. (*Chapter 4*)
4. The first detection of NO in a major asymmetric disk indicates sublimating nitrogen-bearing ices. (*Chapter 5*)
5. Co-locating molecular rings with dust rings in thermo-chemical models is non-trivial. (*Chapter 6*)
6. Discovering trends in thermo-chemical models is more important than perfectly reproducing the data.
7. Never trust a model to estimate the integration time for an observing proposal.
8. ALMA should finish the projects that it started to observe.
9. Taking time off is just as important as finishing something at the end of a day.
10. Knowing when to ask for help is a useful skill to have.
11. A puzzle of 18000 pieces is easier to complete than our understanding of astrochemistry during star and planet formation.

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