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Inextricable ties between chemical complexity and dynamics of embedded protostellar regions

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Inextricable Ties between Chemical Complexity and Dynamics of Embedded Protostellar Regions

- 1.** Chemical evolution of protostellar regions is predominantly determined by the global dynamic physical structure of the system. *Chapter 2*
- 2.** Gases do not always mirror the chemical composition of ices. *Chapter 3*
- 3.** Prestellar core volatiles are not simply inherited by the protoplanetary disk. *Chapter 4*
- 4.** Chemical differentiation between innate Solar Nebula tracers and young Solar System analogues may hint at our Sun being formed from a warmer prestellar core compared to typical protostars. *Chapter 5*
- 5.** The seeds to life are unavoidably planted in infant planetary systems during protoplanetary disk assembly. *This thesis*
- 6.** Chemical processes are universal, thus lessons of the Solar System must be combined with those of extrasolar regions in order to see the provenance of life.
- 7.** Chemistry is not just a tool for understanding star formation.
- 8.** Modelers, observers and experimentalists are mutually inspiring.
- 9.** When communicating with researchers from other communities, it is crucial to first learn to speak each other's languages.
- 10.** Each type of model serves its own purpose, but always remains a representation at the end of the day.
- 11.** A castle is only as strong as its foundation, the same holds for scientific research.
- 12.** It takes years for a mature scientist to evolve from the toddler phase of a PhD graduate.
- 13.** Research is inspiration-driven and a researcher must continuously seek his/her drive.
- 14.** In order to achieve a goal, one needs to take it seriously.