Propositions

accompanying the thesis

Multiple star formation: Chemistry, physics and coevality

1. Large, rotationally supported disks can form in early embedded protostars. (Chapter 2)
2. Disks control the temperature profile of protostellar systems, altering the chemical composition and evolutionary process. (Chapters 3 & 4)
3. One-third of the time, multiple protostellar systems present the conditions for further fragmentation resulting in a non-coeval system, a phenomena independent of separation (Chapter 5)
4. Multiplicity and coevality do not show a strong connection with cloud temperature, whereas there is a relation to cloud core mass (Chapter 6)
5. (Proto)Stellar multiplicity is ubiquitous. Theory, models and observations should start adapting to this fact.
6. The large, multi-disciplinary, international collaborations achieved in astronomy should be studied and used as models to construct similar efforts in other fields, from space engineering to international relations.
7. The formation of stars is far simpler than human relations, behavior and physiology.
8. Sewing is applied math and engineering; cooking and baking are edible chemistry; art is math and science applied to the interpretation of our world. All have large communities dedicated to teaching, exchanging knowledge and experimenting. Science is in everything we do.
9. There is no one-size-fits-all; not in science, life or sewing, but there are basics that can be scaled and adapted to fit many scenarios and situations.
10. To fully grasp the reality of something, it must be viewed from both the inside and the outside.
11. Tea time, whether hot, iced, or with milk and tapioca pearls, is a beneficial habit that needs to be practiced more often.
12. Learning and using more than one language allows us to see the world from different perspectives.

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Leiden, 1 November 2017