

## **Protostellar jets and planet-forming disks: Witnessing the formation of Solar System analogues with interferometry** Tychoniec, Ł.

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## Propositions accompanying this thesis

Protostellar jets and planet-forming disks: witnessing the formation of Solar System analogues with interferometry

- Free-free emission from protostars originates primarily from jets and is well correlated with the bolometric luminosities and outflow forces of these systems. (*Chapter 2*)
- 2. Young protostellar disks are more massive than mature disks by an order of magnitude. *(Chapter 2)*
- 3. Planet formation must begin within the first ~ 0.1 Myr after protostellar collapse starts. *(Chapter 3)*
- 4. Extremely high-velocity molecular jets are ubiquitous in young protostellar systems. *(Chapter 4)*
- 5. Molecular tracers observed with interferometers are a powerful tool to discern the physical components of astrophysical systems, on local and extragalactic scales.
- 6. Intersections of different sub-fields of astronomy are where most of new discoveries await.
- 7. A response to raised doubt in scientific arguments should be a discussion, not mockery.
- 8. Virtual conferences increase accessibility and transparency of discussions and should not be completely withdrawn when regular in-person meetings will be possible again.
- 9. Any ability is not solely inherited but also has to be trained. (*Star Wars: Episode VIII*)
- 10. Work in services (such as restaurants and shops) is an extremely useful experience for a scientist.
- 11. Increased awareness of mental health during the pandemic should not be abandoned after this crisis is over.
- 12. The climate crisis needs coordinated response at the same level as the current pandemic.

Łukasz Tychoniec Leiden, 09.03.2021