# The evolving velocity field around protostars

Brinch, C.

Stellingen belonging to the thesis

# The evolving velocity field around protostars

1. The evolutionary state of young stellar objects can be characterized by the ratio of the radial to azimuthal velocities in the circumstellar molecular gas.
   *Chapter 2,3, and 6*

2. Disks which are deeply embedded in envelope material may be detected by their kinematical fingerprint with high-resolution observations.
   *Chapter 4*

3. The angular momentum axis of young stellar objects can change over time.
   *Chapter 4*

4. The current observational evidence for young disks is inconclusive.
   *Chapter 3 and 6*

5. Freeze-out of molecules in the disk and envelope is a tracer of the evolution which is complimentary to the evolutionary probe provided by the velocity field.
   *Chapter 5*

6. Tomographic reconstruction techniques will be a crucial tool for the interpretation of future ALMA observations of young stellar objects.

7. Problems where resolution is a limiting factor are not always solved by increasing the resolution.

8. With the advance of intuitive and user-friendly computer operating systems, the importance of education in basic programming skills increases.

9. The connotation of science terms such as "gene", "atom", and "chemical" in the public debate creates a negative attitude toward scientists.

10. Mutual respect and freedom of speech are inseparable.

11. The simultaneous public acceptance of man-made global warming and recognition of fossil fuel shortage is an ironic coincidence.

12. "Any sufficiently advanced technology is indistinguishable from magic."
    *Arthur C. Clarke, 1917–2008*
    – Astronomical interferometry can easily seem like magic.

Christian Brinch
Leiden, October 22, 2008