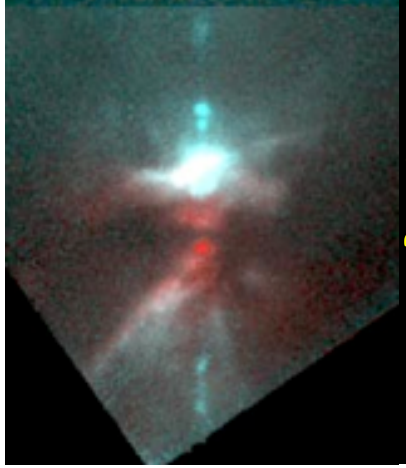


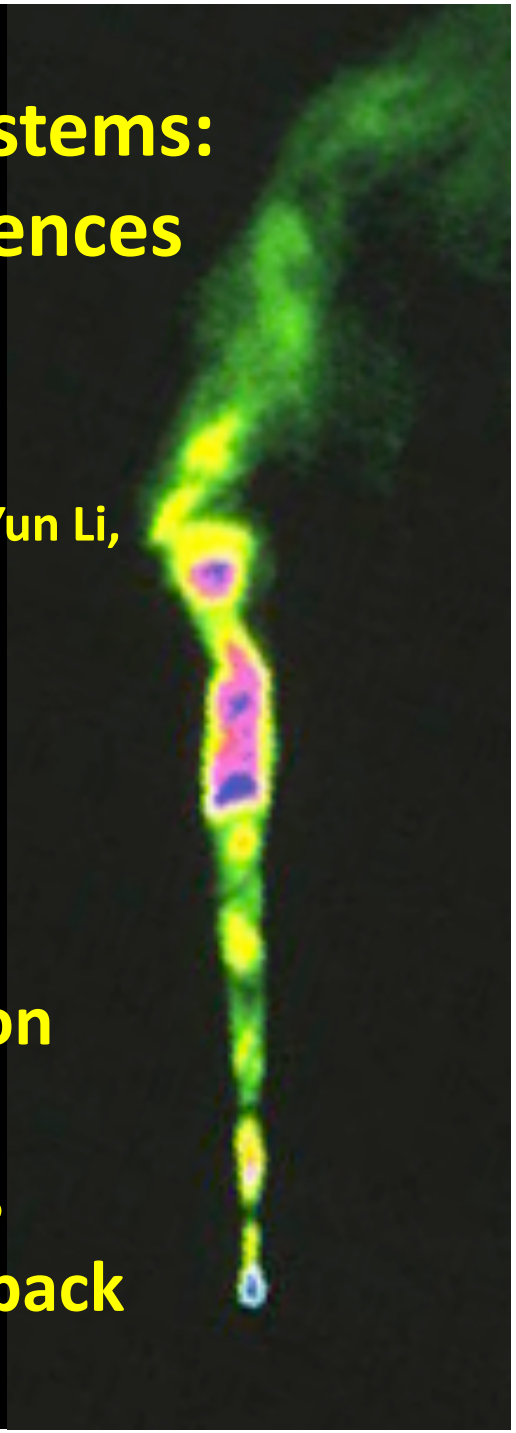
# Panel I: Jets from Various Systems: Their Similarities & Differences

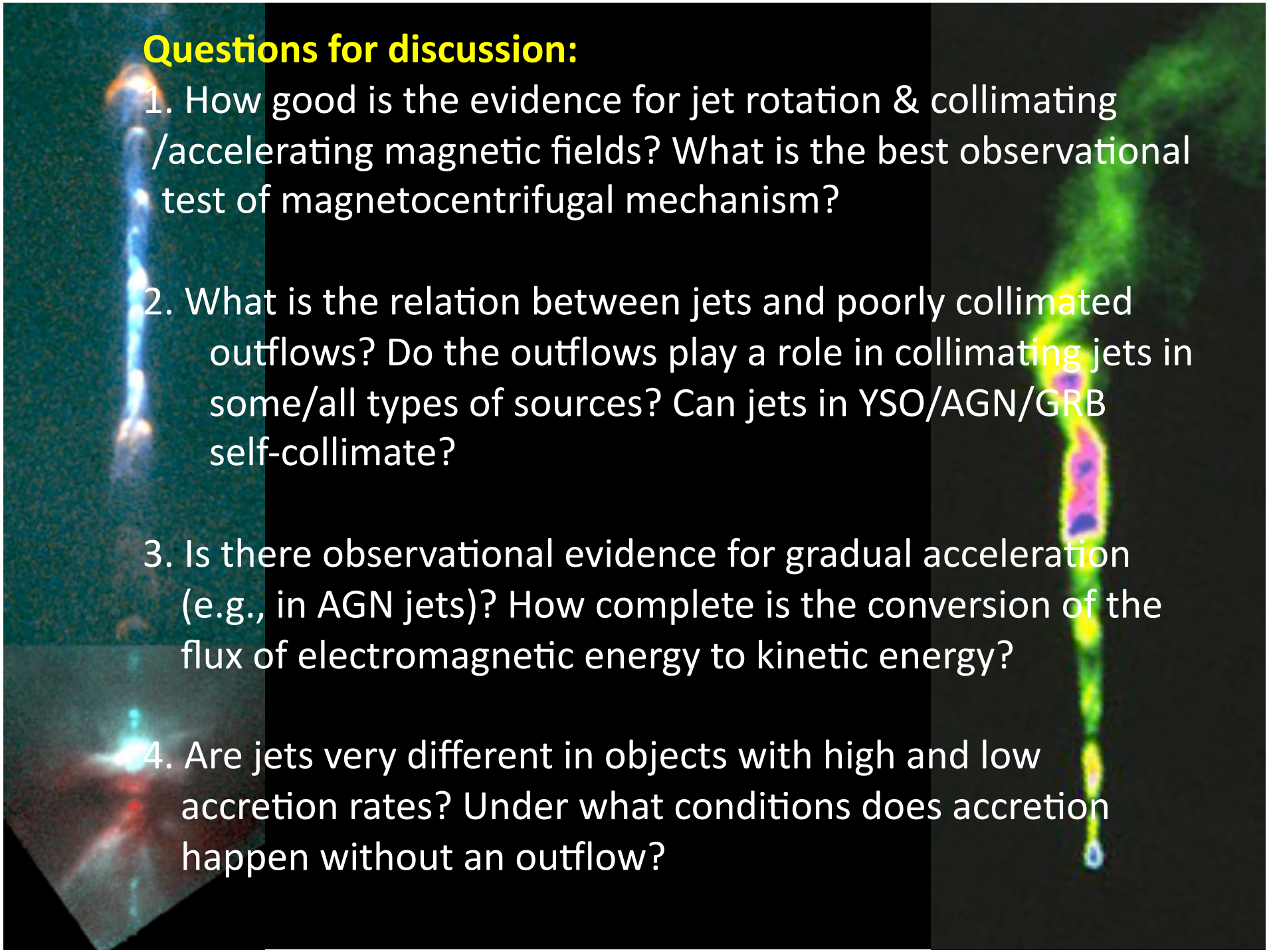

**Chair: Sienny Shang**

**Panelists: Pat Hartigan, Robert Laing, Zhi-Yun Li, Chris Matzner, Daniel Proga**


## Topics

1. What is a jet?
2. Jet acceleration and collimation
3. Stability and propagation
4. Variability and internal shocks
5. Ambient interaction and feedback





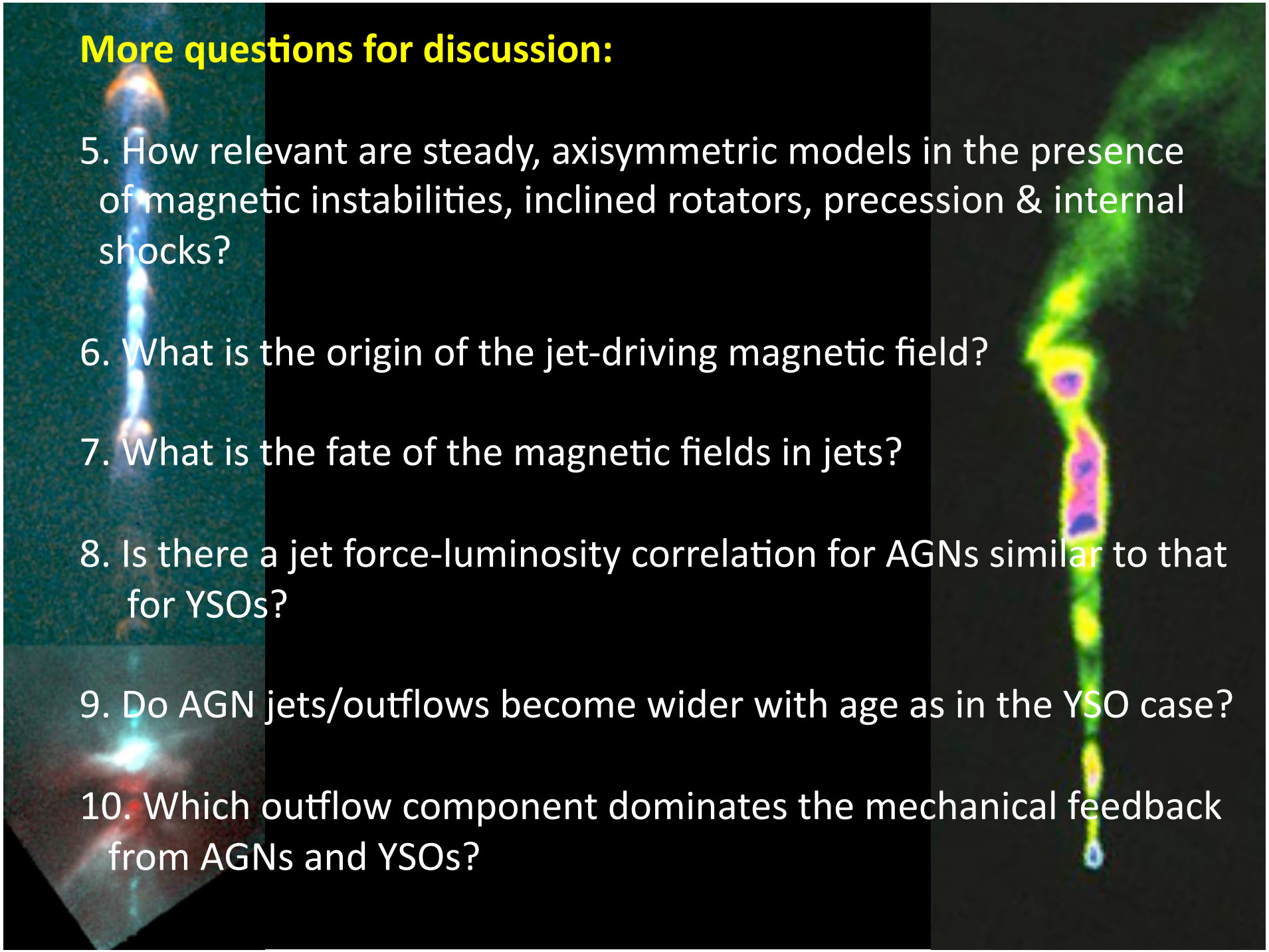
**Questions for discussion:**

1. How good is the evidence for jet rotation & collimating /accelerating magnetic fields? What is the best observational test of magnetocentrifugal mechanism?

2. What is the relation between jets and poorly collimated outflows? Do the outflows play a role in collimating jets in some/all types of sources? Can jets in YSO/AGN/GRB self-collimate?

3. Is there observational evidence for gradual acceleration (e.g., in AGN jets)? How complete is the conversion of the flux of electromagnetic energy to kinetic energy?

4. Are jets very different in objects with high and low accretion rates? Under what conditions does accretion happen without an outflow?



**More questions for discussion:**

5. How relevant are steady, axisymmetric models in the presence of magnetic instabilities, inclined rotators, precession & internal shocks?

6. What is the origin of the jet-driving magnetic field?

7. What is the fate of the magnetic fields in jets?

8. Is there a jet force-luminosity correlation for AGNs similar to that for YSOs?

9. Do AGN jets/outflows become wider with age as in the YSO case?

10. Which outflow component dominates the mechanical feedback from AGNs and YSOs?

## More questions for discussion:

11. Why do only 10% of YSOs show collimated jets?

12. Is the jet driving mechanism the same in massive star formation as in the low-mass case?