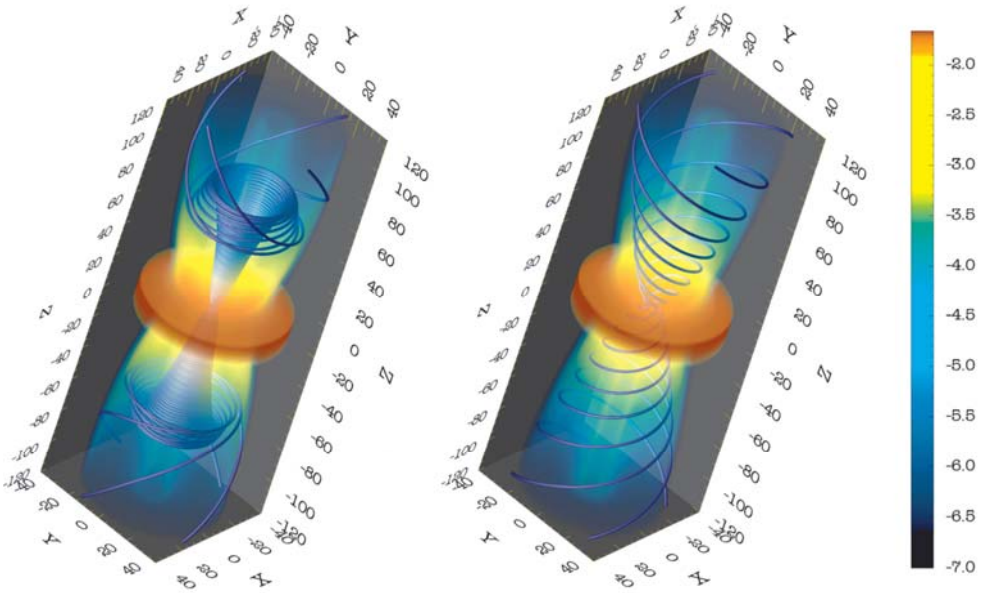
Astronomy & Astrophysics

HIGHLIGHTS: this week in A&A

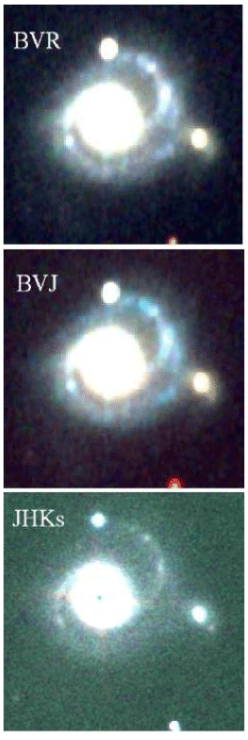
Volume 469-3 (July III 2007)



MHD simulations of jet acceleration from Keplerian accretion disks

"MHD simulations of jet acceleration from Keplerian accretion disks. The effects of disk resistivity" by C. Zanni, A. Ferrari, R. Rosner, G. Bodo, and S. Massaglia, A&A 469, p. 811

This paper presents simulations of jet launching by near-Keplerian accretion discs threaded by a magnetic field. The novel feature of these simulations is the explicit inclusion of the disc structure and magnetic diffusion within the disc using an adaptive grid to resolve the disc better. These simulations represent a substantial improvement over existing disc-wind simulations.



Interaction between galaxies as a quasar fuelling mechanism

"The nearby QSO host I Zw 1: the stellar disk and adjacent objects" by J. Scharwächter, A. Eckart, S. Pfalzner, I. Saviane, and J. Zuther, A&A 469, p. 913

The authors present high-resolution NIR observations of the nearby QSO host I Zw 1, which is one the nearest active galaxies. Their results support the idea that fuelling of an active galactic nucleus is stimulated by interaction with a neighbouring galaxy, even a small one.

In section 10. Planets and planetary systems

"Spectral analysis of the Chandra comet survey" by C. Bodewits et al. A&A 469, p. 1183

This paper analyses cometary x-ray spectra, using their charge exchange emission model, and assesses the importance of the variables that must be taken into account when analysing comet x-ray observations. They clearly show that cometary x-ray spectra reflect the state of the local solar wind.