Astronomy & Astrophysics

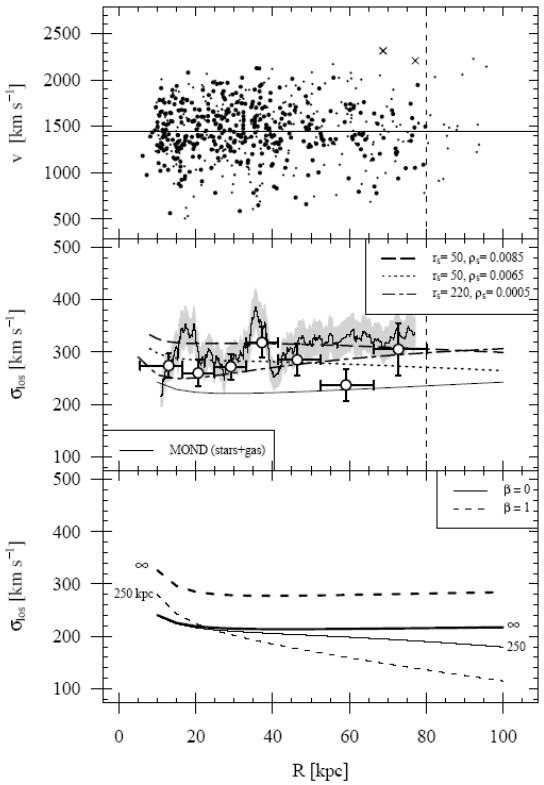
HIGHLIGHTS: this week in A&A

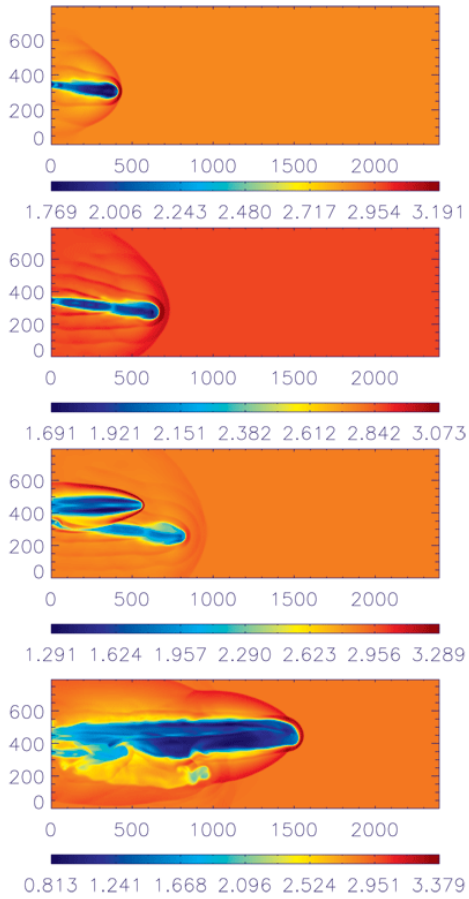
Volume 478-2 (February I 2008)

In section 1. Letters

"The dark matter halo of NGC 1399 - CDM or MOND?", by T. Richtler, Y. Schuberth, M. Hilker, B. Dirsch, and L. Bassino, A&A 478, p. L23

The authors have obtained radial velocities for more than 600 globular clusters around NGC1399, the central galaxy in the Fornax cluster. These extensive data allow them to derive information on the gravitational potential on a smalll scale in the center of galaxy clusters. They do not constrain CDM models, but confirm the previous result that, in the framework of the MOND theory, dark matter is required in clusters, more likely in the form of gas rather than of neutrinos.





In section 6. Interstellar and circumstellar matter

"Interacting jets from binary protostars", by G. C. Murphy, T. Lery, S. O'Sullivan, D. Spicer, F. Bacciotti, A. Rosen, A&A 478, p. 453

Forming stars produce energetic outflows and jets, but multiple proto-stellar systems predominantly show single jets. This paper investigates the cause of this peculiarity by numerically modeling 3D binary jets for various outflow parameters. Results show that the two jets interfere up to the stage where one of them is almost destroyed or engulfed into the second one. The models allow the authors to reproduce some of the observational features of L1551, such as how the secondary jet is bent.

© Astronomy & Astrophysics 2008