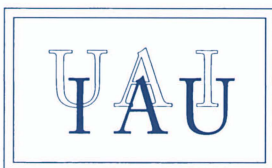
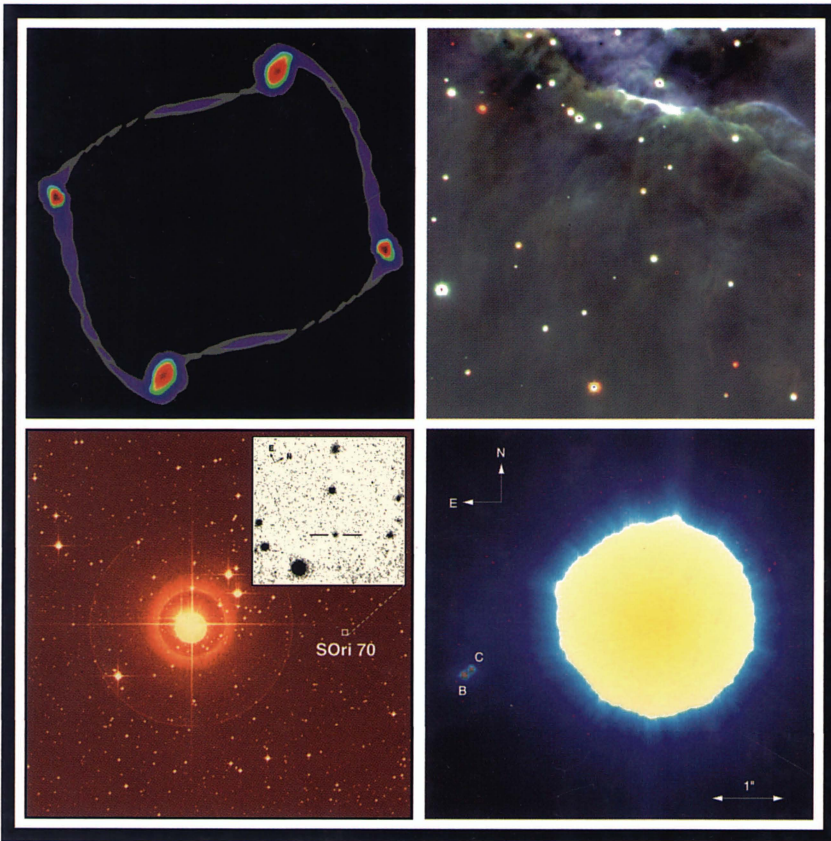


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BROWN DWARFS

Edited by: EDUARDO L. MARTÍN



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BROWN DWARFS

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COVER ILLUSTRATION: Mosaic of observations and models of brown dwarfs.

Upper right corner: This image shows the result of a 3-D hydrodynamical simulation of the collapse of an initially oblate magnetic cloud that has rebounded and fragmented into a multiple protostar system. The fragments initially have masses on the order of Jupiter's. The region shown is about 6 AU across. Courtesy of Alan Boss, Carnegie Institution.

Upper left corner: Young brown dwarfs in Orion. This picture taken in three infrared colors is so far the most sensitive observation of the Orion Nebula. Some of the fainter objects in the field are thought to have a mass only a few times greater than Jupiter's. The picture was produced by a total of 4 hours exposure with the Flamingos camera built at the University of Florida mounted on the international 8-meter Gemini South telescope in Chile. Investigation led by Phil Lucas, University of Hertfordshire, UK.

Lower left corner: Picture of the young star sigma Orionis from the STScI Digitized Sky Survey. The inset shows an infrared image of the methane dwarf SOr170 that is based on data obtained with the 4.2-meter William Herschel Telescope and the 10-meter Keck I telescope. Courtesy of María Rosa Zapatero Osorio and Eduardo Martín.

Lower right corner: Hōkūpaʻa adaptive optics near-infrared image of the binary brown dwarf that has a separation of 2.4 AU and is located at 47.2 AU from the young solar-type star HD130948. Courtesy of Dan Potter, Institute for Astronomy, University of Hawaiʻi. Data obtained at the 8-meter Gemini North telescope in Hawaiʻi, which is operated by the Association of Universities for Research in Astronomy, Inc., under a cooperative agreement with the NSF on behalf of the Gemini partnership: the National Science Foundation (United States), the Particle Physics and Astronomy Research Council (United Kingdom), the National Research Council (Canada), CONICYT (Chile), the Australian Research Council (Australia), CNPq (Brazil), and CONICET (Argentina).

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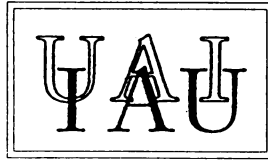
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Edited by

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