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## ASSA NEWS

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### 3RD ASSA SYMPOSIUM - BLOEMFONTEIN

The Symposium, hosted by the Bloemfontein Centre, was held at the Education Centre in a very hot Bloemfontein from 27 - 29 September.

There were members from the Natal, Natal Midlands, Cape, Johannesburg and Pretoria Centres, and also from the Rhodes University Astronomy Society. The Bloemfontein centre was also well represented, together with a number of students from the local University.

The program for the Wednesday included the popular BRAG sessions. That evening, a visit was paid to the Lamont Hussey Observatory, which is now a theatre. The evening's activities were opened by

the Mayor of Bloemfontein, and featured Dr R. S. Stobie's (SAAO) keynote address.

After the formal activities on Thursday, a social gathering was held at the Boyden Observatory, which included a visit to the 60-inch telescope.

The last day of the symposium featured a tour of the Astronomy Department at the Education Centre.

The symposium convenor, Mrs Magdaleen Schoch, and her able assistants deserve a round of heartfelt thanks.

The Proceedings of the Symposium will be published in *MNASSA*, volume 55 (1996).

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## NEWS NOTES

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### NEW TYPE OF OBJECT - BROWN DWARF - DISCOVERED

For years astronomers have suspected that some fraction of the mass of the galaxy is tied up in objects that have not been detected because they have simply too low a wattage. For example, if a "star" is not massive enough, it cannot be powered by burning hydrogen through thermonuclear reactions because its interior simply never gets sufficiently hot. Hypothesized objects of this kind have been nicknamed "brown dwarfs". They represent the logical extension to the sequence of M (red) dwarfs, at the cool end.

However, a group of astronomers from the California Institute of Technology (Caltech) and Johns Hopkins University (Maryland) have just discovered an object which seems to fit the expected characteristics of a brown dwarf. About 7 arcsec away from the nearby dwarf Gliese 229 (RA = 6h 8.5m, Dec =

21° 51'), and only 30 light-years from the sun, they have found a star which shares its proper motion or movement through space. This means that they are probably linked together as a binary system consisting of the star itself and a giant planet.

This object is very faint compared to Gl 229 because it is so cool. However, spectra of it have been taken using an infrared spectrograph and they show the presence of methane, which can only exist if its temperature is less than 1200 degrees Kelvin (about 900 degrees Celsius). The power of the star is estimated as about five millionths of that of the sun, and its mass as from 20 to 50 times that of Jupiter.

The announcement was made on behalf of the team at the conference "Cool Stellar Systems and the Sun" held in Florence in October. Details will shortly be given in the journals *Nature* and *Science*.