

## **Gliese 225.2: An old (stable?) quadruplet**

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### **Abstract**

We discovered with adaptive optics a new component E in the nearby multiple system Gliese 225.2, making it quadruple. We derive a preliminary 24-yr astrometric orbit of this new sub-system C,E and a slightly improved orbit of the 68-yr pair A,B. The orientations of the A,B and C,E orbits indicate that they may be close to coplanarity. The 390-yr orbit of AB,CE computed by Baize (1980) was premature, the period is much longer. Large space velocities indicate that Gliese 225.2 belongs to the thick galactic disk and is not young. This quadruple system survived for a long time and should be dynamically stable. © 2008 Springer-Verlag Berlin Heidelberg.

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