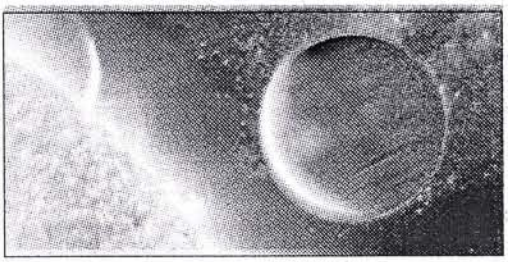
SAKAL TIMES, THURSDAY, 9 JUNE, 2011, P. NO. 8

Planet that goes the wrong way

All planets move around their stars in the same direction as the star spins -- but now astronomers have stumbled onto one that goes the wrong way. Daniel Bayliss, astronomer from the Australian National University (ANU) and his team, using one of the world's largest telescopes in Chile, discovered that a distant planet, WASP-17b, is moving in the opposite direction to the spin of the star around which it orbits.



The discovery throws planetary theories into doubt. Planets are formed from the same disk of rotating material that has given birth to the star around which they move. Until now it has been assumed that any planet orbiting a star would be moving in the same direction as the star's spin, which is true of our own solar system.

However, WASP-17b is quite different, Bayliss said, and its backwards motion is somewhat of a mystery. "It is possible that the planet underwent a close encounter with another giant planet billions of years ago, which altered its orbit so much that it began orbiting backwards," he said, according to an ANU statement.

If it were common, this would not bode well for the chances of life around other stars. Close encounters between giant planets would most probably destroy any small earth-like planet in that system, and wipe out any chance of life arising. At present, only a handful of distant planets are known, but Bayliss is part of a project, called HAT-South, which is monitoring millions of stars in the southern hemisphere to see if they have orbiting planets.

Bayliss runs a set of telescopes in Australia, the data from which is combined with those of identical sets of telescopes operated in Chile and Namibia. This global enterprise should uncover dozens of new planets, providing the necessary information on how common backward movement is in our galaxy. *IANS*