

Seminar

Friday, 30th October 2009

11 am - Room 701

[Professor John Hearnshaw](#)

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Can we find Earth-mass planets orbiting our nearest star, alpha Centauri?

I will describe a new programme at Mt John that aims to find Earth-mass planets orbiting either alpha Cen A or B, which are solar type stars in a well known binary. We are measuring precise radial velocities using the Hercules spectrograph, which I will describe. About 30,000 spectra at S/N \sim 500:1 giving 3 m/s precision will be needed over 3 years. Theoretical studies show that Earth-mass planets can have stable orbits to 3 AU and that such planets will form from a proto-planetary disk, for a wide range of initial conditions.

All Welcome

Contact Details

For further information phone 364 2404, or visit our website: www.phys.canterbury.ac.nz