

Transit of Venus newspaper competition winners

The winners of this year's competition for schools to design a newspaper are announced by Alan C Pickwick and the RAS Education Committee.

The first prize in the 7–11 age group was awarded to the Sullivan Primary School, London, SW6 (teacher Mrs Baiba Murphy) for their entry *The Sullivan Observatory*. Joint second prizes were awarded to Clayton CE Primary School, Bradford, and South Green Junior School, Billerica. The first prize in the 11–14 age group was awarded to Clifton Comprehensive School, Rotherham (teacher Mr Tim Mills) for their entry *The Clifton Cosmos*. Joint second prizes were awarded to The Cheltenham Ladies' College, Cheltenham; Devonport High School for Boys, Plymouth; and Ysgol Gyfun Cwm Rhymini,



Blackwood. The first prize in the 14–16 age group was awarded to The Perse School for Girls, Cambridge (teacher Mrs G Dambaza) for *Our Twin, Venus* by Zoë Monnier-Hovell. Second prize went to Ashby School, Ashby de la Zouch. This year we also invited Overseas Guest Entries. The first prize went to Chettinad Vidy Ashram School, Chennai, Tamilnadu, India (teacher Mr G Bhuvaneshwari) and second prize to Mallya Aditi International School, Yelahanka, Bangalore, India. There were 101 entries made by a total of 50 schools. Scans of the first-prize winning entries are now on the RAS website.

RAS prizes for PhD theses 2004

Alan C Pickwick and the RAS Education Committee are pleased to announce the winners of this year's thesis prizes.

This year's RAS Penston Prize, sponsored by PPARC and Wiley, has been awarded to Clive Dickinson of Jodrell Bank Observatory. His thesis was entitled "Diffuse galactic radiation and its application to CMB observations".

As a member of the Very Small Array team (a JBO/Cambridge/IAC collaboration) he analysed the huge data streams required to measure the Cosmic Microwave Background power spectrum over a wide-range of angular scales. This independently showed that we live in a "flat" universe, dominated by dark energy (70%) and dark matter (30%) with only 5% in the form of baryons.

After completing his PhD he spent a further 18 months at Jodrell Bank to continue analysing VSA data which led to several papers including a high-sensitivity CMB power spectrum (Dickinson *et al.* 2004) extending to smaller angular scales where few measurements exist. Clive has now joined the California Institute of Technology Cosmic Background Instrument Group as a postdoc scholar.

First prize in this year's RAS Blackwell Prize competition was awarded to Paul Williams of the University of Oxford for his thesis entitled "Nonlinear interactions of fast and slow modes in rotating, stratified fluid flows". Paul worked in the Atmospheric, Oceanic and Planetary Physics Laboratory where he studied Rossby waves that are responsible for the familiar pressure variations seen on weather maps. He also studied inertia-gravity

waves, which are much smaller in wavelength and he was able to show that inertia-gravity waves were actually able to cause major transitions in the spatial patterns of the Rossby waves. He also showed that the transitions could be simulated in computer models by including a stochastic representation of the inertia-gravity waves. This finding added to the evidence that numerical models of planetary atmospheres may be improved by adding random noise, a counter-intuitive concept that meteorologists are beginning to take seriously.

Paul now holds a postdoctoral research fellowship at the Centre for Global Atmospheric Modelling at Reading University, working to improve our ability to quantify the probability and magnitude of future rapid changes in the Earth's climate.

The second prize was awarded to James Wookey of the University of Leeds, School of Earth Sciences. His thesis was entitled "Modelling and interpreting seismograms for 3-D Earth structure: a study of mid-mantle anisotropy".

For more details of the winners' work, please see the RAS web site. ● The deadline for nominations for this year's prizes is 31 January. The two categories are the RAS Michael Penston Prize (sponsored by PPARC and Wiley) for astronomy, and the RAS Blackwell Prize covering geophysics, solar-terrestrial physics and planetary sciences. Details of how to apply are on the RAS web site at <http://www.ras.org.uk/html/education/edcomm2.html>.

RAS Science Writing Competition for students

The next deadline for entries for the RAS Science Writing Competition is approaching. Undergraduates and postgraduates registered at UK universities have until 31 January 2005 to send in their entries. We are especially looking for good, clear English showing flair and imagination, combined with accurate, up-to-date scientific content, in an article up to 2000 words long. The first prize is £200 and winners could see their work in print in *A&G*. Details of the competition can be found at <http://www.ras.org.uk/html/education/edcomm2.html>.

New Fellows

The following were elected as Fellows of the Society on 8 October 2004:

- Dr M Anand, Dept of Mineralogy, Natural History Museum, London.
- Mr G Arnold, Bucknell, Shropshire.
- Ms K Bird, Lewisham, London.
- Mr D M Cole, Keble College, Oxford.
- Dr C Dickinson, California Institute of Technology, Pasadena, USA.
- Rt Hon. Lord Michael Forsyth,

- House of Lords, London.
- Prof. R Golding, Mooloolah, Queensland, Australia.
- Rt Hon. D Heathcoat-Amory, London.
- Ms A Heward, Godalming, Surrey.
- Mr M L H Hope OBE, London.
- Mr M Hopewell, Elstree, Herts.
- Prof. R Marshall FRS, Dept of Experimental Physics, University of Manchester.
- Mr A McConnachie, Institute of Astronomy, Cambridge.
- Mr B M Mellors, Belvedere, Kent.
- Dr T A Minshull, SOES, Southampton Oceanography Centre.
- Dr A Rapalini, Ingeodav, Dept

- Geol Sciences, FCEYN, UBA, Buenos Aires, Argentina.
- Mr C W Robson, Richmond, N. Yorkshire.
- Mr P M Rose, Bromley, Kent.
- Prof. D H Saxon, Bridge of Weir, Renfrewshire.
- Dr H Takai, Physics Dept, Brookhaven National Labs, NY 11973, USA.
- Mr C Waites, Peterlee, Co. Durham.
- Mr D Warrington, Braintree, Essex.
- Miss V Wild, Institute of Astronomy, Cambridge.
- Ms H Worters, Preston, Lancs.
- Miss B Youngs, Leeds.