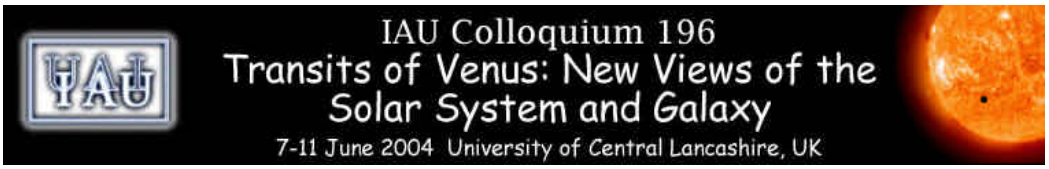

IAU C196 Transits of Venus
Third Announcement

This is the third, and final, announcement for IAU C196 to be held in Preston, UK, 6-11 June 2004. It contains the conference programme, speakers' instructions and instructions for publication of proceedings papers. For registration and additional information, see the website:

www.transit-of-venus.org.uk/conference

DAY 0. SUNDAY, 6 June 2004

Most participants will arrive by train or bus to Preston. For those staying in Roeburn Hall, the train station is about a 10-minute walk; and the bus station is about a 15 minute walk. See the pdf map on the website for location of Roeburn Hall (code "Ro" on Pedder Street) and the Harrington Building (code "Ha" on Adelphi Street). For those with too much luggage for the walk, a taxi should cost about £3. The Holiday Inn is next to the bus station, and about a 10-minute walk from the train station. Other recommended B&Bs and hotels are further away. It is recommended that you take taxis to these.

Registration will be open at the Harrington Building 16:00 – 20:00. Light snacks and a welcome drink will be provided from 18:00. A map of the University of Central Lancashire campus can be found on the above-named website showing the Harrington Building. It is a 5-10 minute walk from the Roeburn Hall residence.

There are many pubs and restaurants within walking distance of campus. The city centre is only a 10-minute walk. Information will be provided in the conference bag.

For those with cars parking permits for Harrington car park and Roeburn car park will be provided at registration.

DAY 1. MONDAY, 7 June 2004

Internet connections will be available throughout the day in the Harrington Building.

The registration desk will be open 08:00 – 12:00 and 13:30 – 16:00.

09:00 – 09:05 Welcome from Gordon Bromage, co-chair of the SOC and chair of the LOC
09:05 – 09:20 Welcome from Malcolm McVicar, Vice-chancellor of the University

Session 1. The AU and the pc

09:20 – 10:20 The astronomical unit now (Myles Standish, Jet Propulsion Laboratory, USA) Keynote

10:20 – 11:00 coffee/posters/discussions

11:00 – 11:30 Precision time and rotation of the Earth (Dennis McCarthy, US Naval Observatory, USA) 11:30 – 12:00 Thomas Henderson and α Centauri (Brian Warner, University of Cape Town, South Africa)

There are many restaurants and pubs within easy walking distance of Harrington Building. Students' cafeterias are also open on campus.

12:00 – 13:30 lunch

Session 2. Transits of Venus: history, results and legacy

13:30 – 14:40 Jeremiah Horrocks and the Transit of Venus (Allan Chapman, Oxford University, UK) Keynote

14:40 – 15:00 Jeremiah Horrocks' Lancashire (John Walton, University of Central Lancashire, UK)

15:00 – 15:40 coffee/posters/discussions

15:40 – 16:00 Crabtree's Venus-transit measurement (Nicholas Kollerstrom, University College London, UK)
16:00 – 16:30 Transits of Venus. A French view (Suzanne Débarbat, Paris Observatory, France)
16:30 – 17:00 James Cook's 1769 expedition to Tahiti (Wayne Orchiston, Anglo-Australian Observatory & Australian National Telescope Facility, Australia)

18:00 – 20:00 Mayor's reception – Harris Museum (buffet meal and drinks) in the neoclassical Harris Museum and Art Gallery in Preston City Centre. The museum and exhibitions will be fully open to participants and guests during the evening. The event is free to registered participants and registered guests. The Harris Museum is a 15-20 minute walk from Roeburn Hall and from Harrington Building.

DAY 2. TUESDAY, 8 June 2004

Transit and Banquet

No matter how late you stayed up the night before, or how good a time you had at the reception, this day starts EARLY!

Transport will leave from Roeburn Hall at 05:15 BST (British Summer Time = GMT + 1) for Alston Hall and the University's Alston Observatory 8 miles (13 km) northeast of Preston. If you miss the bus, you will need to provide your own transport; departure time is firm and will not be delayed. First contact is at 06:19:46 BST and travel time to Alston is about 30 minutes (speed limits are low in the UK, and they ARE enforced by speed cameras on this route!). If you choose to drive yourself, please park at Alston Hall; there will be a map in your conference bag. There will be no parking at the observatory. The walk from Alston Hall to the observatory takes 5 minutes.

Eight telescopes will be set up with solar filters and projection to allow everyone to view some part of the transit directly. Obviously, for first and second contact it will not be possible for everyone to do this simultaneously. Alston Observatory's Grubb twin 15-inch refractor (1894) will have a camera and projection; about 20 people at a time will be able to view the projection in this dome. Web connection and projection from other sites will also be running in the main observatory building.

NB: If you must see first, second, third and fourth contacts directly for yourself, please bring solar filter material and your own binoculars or telescopes. If you are bringing your own telescope, please contact us with details to make arrangements.

From 07:15 full English breakfast will be served at the lovely Victorian Alston Hall next to the observatory. The cost of this is included with your registration.

At 09:00 transport will leave for Much Hoole and Carr House. This takes about 40 minutes. By kind permission of the current owners, we will visit Carr House and be allowed to enter the house in small numbers and be taken upstairs to the room from which Jeremiah Horrocks made his seminal observation of the transit of 24 November 1639 (Julian Calendar). More telescopes and projection will be set up in the meadow of Carr House. We will also visit the Church at Much Hoole to see the Horrocks memorials there. There will be many activities that day – this is the biggest event ever to hit Much Hoole Village – including BBC coverage of the transit for which you may well be part of the show. Third and fourth contacts will only be "observable" by web projection, unless you have brought your own telescope of binoculars (with solar filters!).

NB: Would those who seriously wish to observe the entire transit and therefore want to stay at Alston Observatory, please contact the LOC at tov@uclan.ac.uk to make arrangements.

Following fourth contact at 12:23:28 BST, the busses will take you back to Roeburn Hall. You will have the afternoon free to explore Preston, its parks, or, more likely, rest. Transport will leave again at 17:30 sharp from Roeburn Hall to take you 8 miles (13 km) to the historic fortified manor house of Hoghton Tower (http://www.hoghtontower.co.uk/) for the banquet. This is a spectacularly beautiful 16th-century "castle" on a hill overlooking the green Lancashire countryside that has been the home of the de Hoghtons since 1066 (and all that!). You will be able to tour the public rooms of the house, be taken into the normally-unvisited cellars and tunnels, and have full use of the private gardens. All drinks and food are included in the price of the conference dinner (UKP40) which will be held in the Banqueting Hall (http://www.hoghtontower.co.uk/banqueting.htm) where King James I knighted a loin of beef "Sir Loin". It is widely thought that Shakespeare worked at Hoghton Tower. Hoghton Tower and the banquet should not be missed.

Transport will depart soon after dark at midnight (this is summer at 54 degrees north) so there will be a chance of star viewing (for those of you who can still see by then) from the dark grounds. It will take about 20 minutes to get you back to Roeburn Hall.

DAY 3. WEDNESDAY, 9 June 2004

Following the previous day's very early rising for the transit, and very late return from the banquet, this morning's session will start a wee bit late.

The registration desk will be open 10:00 – 12:00 and 13:30 – 16:00.

Session 2 continued Transits of Venus: history, results and legacy

10:00 – 10:30 black coffee/more coffee/strong coffee/extra coffee/discussion

10:30 – 10:50 The 1761 and 1769 Transit of Venus observations from Batavia (Dutch East Indies) (Robert van Gent, Institute for History, Utrecht, Netherlands)
10:50 – 11:10 The 1761 transit of Venus dispute between Audiffredi and Pingré (Luisa Pigatto, University of Padova, Italy)
11:10 – 11:30 Observations of planetary transits made in Ireland in the 18th century and their influence on the development of astronomy in Ireland (John Butler, Armagh Observatory, Northern Ireland)
11:30 – 12:00 19th-century American expeditions (Steve Dick, US Naval Observatory, USA)
12:00 – 12:20 The Mexican expedition to observe the December 8, 1874 transit of Venus in Japan (Christine Allen, National University of Mexico)

12:20 – 14:00 lunch

Session 3. Transits, the solar system and extra-solar planets

14:00 – 14:30 Mikhail Lomonosov and the discovery of the atmosphere of Venus during the 1761 transit (Mikhail Marov, Keldysh Institute, Russia)
14:30 – 14:50 Exobiology of Venus (Michael Simakov, Russian Academy Science, Russia)
14:50 – 15:20 Probing extrasolar planet atmospheres through transits (Ignas Snellen, Royal Observatory Edinburgh, Scotland)

15:20 – 16:10 coffee/posters/discussions

16:10 – 16:30 Precise determination of the motion of planets and some astronomical constants from modern observations (Elena Pitjeva; Russian Academy of Science, Russia)

16:30 – 17:00 No transit necessary. The MOST space mission and reflected light from exoplanets (Jaymie Matthews, University British Columbia, Canada)

Wednesday EVENING.
Invited talk and Jeremiah Horrocks Memorial Public Lecture.

18:30 – 20:00 The Milky Way in 3D (Michael Perryman, European Space Agency, Netherlands)

DAY 4. THURSDAY, 10 June 2004

The registration desk will be open 08:00 – 12:00 and 13:30 – 16:00.

09:00 – 09:15 The black drop effect explained (Don Kurtz, UCLan presenting for Jay Pasachoff, Williams College)

Session 3 continued: Transits, the solar system and extra-solar planets

09:15 – 09:30 Orbit of A Lunar Artificial Satellite. Analytical Theory of Perturbations
(Bernard De Saedeleer, (University of Namur Belgium)

09:30 – 09:45 The Spin-orbit resonance of Mercury: a Hamiltonian approach (Sandrine D'Hoedt, University of Namur, Belgium)
09:45 – 10:00 Observation and reduction of mutual events in the Solar System (Benoit Noyelles, A Laboratoire d'Astronomie, Lille, France)
10:00 – 10:30 Early dynamical evolution of the solar system - models and constraints inferred from asteroid and KBO dynamics (Kleomenis Tsiganis, University of Nice, France)

10:30 – 11:10 coffee/posters/discussion

11:10 – 11:40 Classical and modern orbit determination for asteroids (Giovanni Gronchi, University of Pisa, Italy)

Session 4. Parallaxes – setting the scene

11:40 – 12:10 The (f)utility of ground-based parallaxes (Dave Monet, US Naval Observatory, USA)
12:10 – 12:40 Sub-millisecond of arc stellar parallaxes and Hubble Space Telescope - History and recent results (Fritz Benedict, University of Texas, USA)
12:40 – 13:00 Transits of Venus and orbital resonances (Jim Message, University of Liverpool, UK)

13:00 – 14:30 lunch

Session 5. New views of the galaxy. Parallaxes, distances and implications for astrophysics

14:30 – 15:00 The Pleiades question, the definition of the zero-age main sequence, and implications (Floor van Leeuwen, Cambridge University, UK)
14:50 – 15:10 Pleiades distance from the binary HD23642 (John Southworth, Keele University, UK)
15:10 – 15:40 Chromatic effects in Hipparcos parallaxes and implications for distance scales (Dimitri Pourbaix, Institute of Astronomy and Astrophysics, Brussels, Belgium)

15:40 – 16:20 coffee/posters/discussion

16:20 – 16:40 The use of eclipses in the evaluation of absolute stellar information (Ed Budding, Carter Observatory, New Zealand)
16:40 – 17:00 High resolution pulsar astrometry (Walter Brisken, NRAO, USA)

18:00 Transport will depart from Roeburn Hall for Hurst Green (UKP20). The drive takes 30-40 minutes. At 19:00 Fr. Fenton O'Reilly, head of the Stonyhurst astronomy club, will show those who are interested the historic telescope at Stonyhurst College for about 30 minutes. Others have free time to wander the grounds of Stonyhurst College, a Catholic school (at one time boys, now boys and girls) with many illustrious old boys: Arthur Conan Doyle, Gerard Manly Hopkins, for example. J.R.R. Tolkien's sons taught at this school and he imagined much of "The Lord of the Rings" while walking the lovely countryside around Hurst Green. The easy 30-minute walk up to the old bridge along Dean Brook may well reward you with sightings of apparent Hobbit holes and other scenes from the books. This is the real thing! Dinner will be at 20:30 at the Shireburn Arms (not far from Shire lane) overlooking the Ribble River Valley. For those who do not care to walk to Dean Brook, through the village, or to Stonyhurst College, drinks at the Shireburn may start as soon as you arrive, although in that case it will be from your own pocket.

23.00 Transport will take you back to Roeburn Hall after dinner, arriving about 23:30.

Day 5. FRIDAY, 11 June 2004

Session 6. New views of the galaxy. Future space and ground-based programmes.

09:00 – 09:30 Microarcsecond astrometry with *Gaia*: the solar system, the Galaxy and beyond (Coryn Bailer-Jones, Max Planck Institute, Heidelberg, Germany)
09:30 – 10:00 Radial velocities with *Gaia* (Mark Cropper, Mullard Space Science Laboratory, UK)
10:00 – 10:30 Jasmine (Naoteru Gouda, National Astronomical Observatory of Japan)
10:30 – 10:50 VERA (VLBI Exploration of Radio Astrometry) project (Hideyuki Kobayashi, National Astronomical Observatory of Japan)
10:50 – 11:30 coffee/posters/discussion

11:30 – 12:30 Meeting Summary (Richard Strom, University of Amsterdam, Netherlands)
12:30 – 12:40 The last word

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Speakers' instructions

We will have a data projector and an overhead projector available. There will be a speaker preparation room where those with PPT presentations may load them onto a computer identical to the one in the conference hall to test them. It is strongly recommended that you do this, then copy your presentation onto the main computer (running XP and PPT) in the conference hall prior to the start of your session.

For those of you who must use your own laptop computers, please test them thoroughly before your session with our projector in the conference hall.

NB: All setup time comes out of the time for YOUR talk. There is no slack in the schedule. If you have computer problems and it takes you 10 minutes to fix them, then you must shorten your talk by 10 minutes. Please make sure this does not happen to you, either by using our computer, or by thoroughly testing yours with our projector prior to the start of your session. The conference hall will be open and technical support will be available from 08:00 each morning.

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Information on the proceedings for C196.

The new Publisher for IAU publications as of 2004 is Cambridge University Press (CUP). All publications (Proceedings of IAU Symposia, Colloquia, Highlights and Transactions) will become available both in print and on-line. The IAU contract with CUP stipulates that Proceedings of IAU Symposia and Colloquia should appear within six months after the conference. Since the publisher needs three months to make the final product, the three months right after the conference are the period in which the editors have to do their job. This requires that speakers bring their manuscripts to the conference and submit them on CD or diskette, or by email before the conference. Authors

are allowed an additional four weeks after the conference to re-submit any revised manuscripts, if desired. The intention for this is only to include changes that result from interactions at the conference itself.

You can download the files needed to put your papers into the correct latex format from the web site.

www.transit-of-venus.org.uk/conference

Please use the sample.tex file. You may use other graphics packages, if you wish, but you will make the editors' job much easier if you will stick to the two in the sample.tex file - namely, epsf and graphics.

Please NB:

Do not change font sizes.

Proofread your paper before submitting it.

Check your references.

Check that you do not have any figures or tables that are over the boundary.

Make sure that your figure labels are readable after reduction. Check the ps file for this after running latex. Many figures have to be redrawn because of this problem with delays for both author and editor.

Do not be too clever with your latex. Remember that tables and figures may have to be shifted to other positions in the editing process. Keep your latex relatively simple and flexible. For example, avoid use of minipage or extensive use of mbox. Do not use plotfiddle unless absolutely necessary. It is better to redraw the figure than to patch problems with plotfiddle (which can result in boundary violations).

The above are common problems for conference proceedings papers.

Page limits:

Keynote talks and conference review: 20 pages (Myles Standish, Allan Chapman and Richard Strom)

Invited talks: 16 pages (30-minute talks)

Contributed talks: 12 pages (20-minute talks)

Posters and poster/talks: 8 pages (posters and 15-minute talks)

The times include setup time (for PPT, for example) and question time.

The page limits are generous for conference proceedings. This is because CUP, the new IAU publishers allows 600 pages for a volume. Nevertheless, the editors are depending on some authors

not to use the full allotment to leave room for extensive discussion, which will be recorded and transcribed. Please do not exceed your page limit, use all of it if you wish, but feel free to submit a shorter paper, if that is appropriate for you.