

# CASTEP FESTIVAL 2006

## UK CDG MEETING

Thu 31st August - Thu 7th September 2006

The Towler Institute, Vallico Sotto, Tuscany

[www.tcm.phy.cam.ac.uk/~mdt26/tti/tti.html](http://www.tcm.phy.cam.ac.uk/~mdt26/tti/tti.html)

September 10, 2006

This is the final programme for the CASTEP FESTIVAL 2006 to be held at the Towler Institute. The aim of the workshop is to reunite the six original authors of the modern version of the CASTEP plane-wave density functional program in the same building (which never happens) and then get them to produce a new update of CASTEP containing all the things they had meant to code up for years and never got round to. As inevitably some of these things are rather tedious they have prevailed upon MDT to organize some healthy excursions in the mountains and some good healthy Tuscan restaurants for the evenings.

## 1 LIST OF PARTICIPANTS

Stewart Clark	University of Durham	<a href="mailto:s.j.clark@durham.ac.uk">s.j.clark at durham.ac.uk</a>
Phil Hasnip	University of York	<a href="mailto:pjh503@york.ac.uk">pjh503 at york.ac.uk</a>
Chris Pickard	University of St. Andrews	<a href="mailto:cjp10@st-andrews.ac.uk">cjp10 at st-andrews.ac.uk</a>
Matt Probert	University of York	<a href="mailto:mijp1@york.ac.uk">mijp1 at york.ac.uk</a>
Keith Refson	Rutherford Appleton Laboratory	<a href="mailto:k.refson@rl.ac.uk">k.refson at rl.ac.uk</a>
Matt Segall	Inpharmatica Ltd.	<a href="mailto:mds21@cam.ac.uk">mds21 at cam.ac.uk</a>
Mike Towler	University of Cambridge	<a href="mailto:mdt26@cam.ac.uk">mdt26 at cam.ac.uk</a>
Samantha Keil		
Saska Towler		

## 2 FLIGHTS AND TRANSPORT

This section gives details on how to get to the Institute for people flying into Galileo Galilei Airport, Pisa. Further details about transport, including how to drive to the Institute, are given on the TTI web site.

Most of the participants will arrive on Thursday 31st August at Pisa airport on flight LS547 from Newcastle (dep. 11.40 arr. 15.15). Mike and Sam will be at the airport from 15.30 in Froggie the TTI Transport on their way home from their holiday in Butlins, Tuscany. Froggie and the hire car will then drive in convoy to TTI.

Dr. Refson will arrive at Pisa airport on Friday 1st September at 10.25 am and should make his own way to the TTI by train and taxi following the general instructions below.

*How to get to the TTI from Pisa airport:*

Go to Pisa Centrale train station - either by taxi in 5 minutes from the airport or by a short train ride from Pisa Aeroporto station (which you get to by walking out of the left-hand side of the airport). You then want to get a train to Barga-Galliciano. This is north of the city of Lucca along a branch line going up the valley of the river Serchio into the mountains (see the map on the TTI web site). Depending on the train time, you may need to change at Lucca to get the train north - the train will usually be flagged as going to "Aulla", "Minucciano" or "Piazza al Serchio" though I can't guarantee this is true for all of them. Don't forget that in Italy you need to validate your train ticket by getting it stamped in the yellow machines on the platform or you may have to pay a fine. Other than that, Italian trains are absurdly cheap by international standards.

At Barga-Galliciano station you should find a TTI representative or a taxi waiting for you. If no-one is there you can wait in the excellent station café until he arrives - do call if you have to wait more than five or ten minutes.

In emergencies it is possible to get a taxi to Vallico Sotto from the station but in general this needs to be pre-booked - see the instructions on the web site (Barga Taxi : taxibarga@libero.it Tel. 340 1669279 or 348 8106112). If you are a non-Italian speaker who hasn't pre-booked and need to talk to the guy on the phone you will find he doesn't speak English so just say (phonetic) "Taxi a Vallico Sotto da la stazione di Barga? Inglyzi. Non parlo italiano." or similar down a phone at him - the trip should cost 30 Euro.

In case of problems contact Mike on his mobile phone - 3478077359. Additional assistance is available from Samantha Keil on 3478077418. The TTI has a direct phone line (0583 761706) but this should be used as a last resort as people generally need this for internet use.

### **3 THINGS TO BRING WITH YOU**

Whatever you like, plus :

- Your laptop, if required - see note in next section.
- Summer hiking gear such as boots, socks, mini-rucsacs etc.
- Italian plug converters if you want to plug anything in (we have some spare but donations of these are gratefully accepted). Our sockets mostly have two round pins (with an optional third one between them). There are two types of thin prongs on European adaptors. You want the thinner of the two.
- A towel
- Some Euros for spending in restaurants and shops. Please note that there is no easily accessible cash machine near the Institute, and although we might pass them from time to time on our afternoon trips, large numbers of people getting money out can cause considerable delays. There is a cash machine in Pisa airport to your right as you emerge into the arrivals hall.
- People who intend to visit caves should bring some clothes that you don't mind getting wet and a torch. The clothes can also be used in the Orrido di Botri canyon walk.
- Sunscreen

All visitors to the Insitute are welcome to bring nice bottles of wine and interesting things.

Remember that squishy luggage is easier to fit into multiply occupied cars than giant hard-shelled suitcases.

## 4 TTI TECHNICAL EQUIPMENT

There are three Sony Vaio and four Acer Ferrari 4005 laptops in the Institute available for public use all in dual-boot configurations running Suse Linux 9.3 or 10.0 plus Windows XP.

All connections are made through a WiFi wireless network (802.11b or 802.11g). If you wish to bring your own laptop then it therefore needs to be wireless-enabled if you wish to log into the network. Three spare wireless network cards that you can plug into your laptop PC card slot are available - but note this can be tedious to set up on some machines so clearly it is better to wireless-enable it before you come. The Institute SSID is 'titi' and the network is completely unencrypted due to the total absence of hackers, or indeed computers, in remote mountain villages.

I'm afraid that for the moment the Institute is still on dialup (the wireless network plugs straight into the telephone through a Wiflyer router). Large files should thus be brought with you on your laptop rather than downloaded when you get there. The connection is certainly fast enough for multiple people to do remote logins and terminal-based email. Viewing graphical internet pages is OK when only one person is doing it so try to do this sparingly. Finally, please turn off things like Microsoft's Automatic Update feature - downloading Gb of files to patch all the security holes in your machine while other people are trying to work is not a good idea.

The TTI management is very sorry about the slow connection but would like to stress how difficult it is to get a decent broadband connection in rural Italy. Italian fast connections are almost all ADSL and this is never going to get to such a remote area. It is possible to get satellite equipment but this is currently beyond our financial means and apparently there is a time delay problem typing on remote computers anyway. We seem to be only a year or two from having appropriate technology to wire the Institute properly with the outside world - such as Wimax or floating giant airships sailing over Europe and so on. In the meantime, all suggestions for improving connectivity will be gratefully received.

Apart from computers and networking devices, we also have the following equipment available for conference participants to use:

- Canon Pixma ip4000 colour inkjet printer (on a wireless print server, so one can print from anywhere in the Institute)
- Hi-Ti Transphotable photo printer for instant printing of your photographs (you can plug in your camera directly - no need to go through a laptop - accepts all memory card formats that I am aware of).
- Epson Perfection 4990 scanner
- A3 laminator
- Guillotine.
- Finepix F455 digital camera
- Two memory sticks
- Driver disks for most of the above.
- A supply of writeable CD-Rs, CD-RWs and DVD-Rs.
- the usual stationery and staples etc..

A technical guide to the TTI computer systems will be available in time for the conference. There is also a reasonable selection of scientific reference books, though this needs to be and will be increased..

## 5 PRESENTATION EQUIPMENT

The church is equipped with a good quality NEC MT1075 projector and an auxiliary Toshiba DPD TDP-T250U projector with DVI and regular RGB cabling . There is a giant 16' by 12' main screen, a 7'8 x 5'9 electric auxiliary screen, an Avervision document camera, a dual projection stand, a DVD player with decent speakers, and various wireless control devices. The Acer Ferrari laptops are recommended for driving the projector as they have DVI output ports. There is a giant blackboard in the church and a smaller one in the main corridor stolen from the TCM Seminar room in the Cavendish Laboratory.

The NEC projector is wireless capable, so you can beam your talk from your laptop straight to it from anywhere in the room, as well as with old-fashioned direct connection (technical specs on the TTI website). If you don't want to bring your laptop, the projector also allows PCMCIA card Mobile disks to be plugged into it. The Insitute laptops - equipped with Suse Linux 9.3 and Windows XP - will of course also take CDs and have the usual software such as Acroread and Powerpoint. On balance it is probably best to bring your talk on a CD or email it to Mike beforehand and he will ensure that it is on the relevant machine ready for your talk.

The Avervision document camera is a sort of cool overhead projector. It will display any printed document, photo, slides, x-ray film or 3D object straight through the projector, so basically you can dissect a frog live on the wall. There is a Victorian microscope with an attachment that allows it to be connected to the Avervision, so biological people can project the microworld on the big screen. Although we have a table with a white square painted on it, non-electronic talks are probably better on white pieces of paper rather than on transparencies..

You can of course ignore all the technology and use the blackboard.

## 6 CONFERENCE SCHEDULE

Here is the schedule for the workshop. All excursions and activities are, of course, optional. All suggestions gratefully received.

Thursday 31st August

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MOST ARRIVALS

Dinner at Il Garfagnino

Friday 1st September

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DR. REFSON ARRIVAL

WORK

Mountain hike to Monte Procinto

Dinner at Alta Matanna

Saturday 2nd September

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WORK

Early evening trip to Lucca

Dinner at La Rondine

Sunday 3rd September  
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WORK

Special dinner cooked by Mike - ossubuco, zampone and lentils

Monday 4th September  
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WORK

Trip to the Tana di Cascaltendine  
Dinner at Il Mulino  
Cinema Vallico - "Warlords of Atlantis"

Tuesday 5th September  
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WORK

Drive over the mountains past Fornovalasco  
Dinner at Eremo di Calomini

Wednesday 6th September  
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WORK

Dinner at Da Sandra

Thursday 7th September  
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DEPARTURES

## **7 FINAL THOUGHT**

HAVE FUN AT THE TOWLER INSTITUTE!