

Using your laptop at the ICTP

Please follow first the indications for either cable or wireless connections. When everything works fine, DHCP will assign your computer an IP address of the form 10.57.x.y or 10.58.x.y. You might then have to change the configuration of your web and mail programs in order for them to be fully functional (see second page). Please see also the list of web resources at the end of the document.

Laptop points with cable

There are desk spaces with network cables ready to use in the lower level of the AGH (area between the computer labs and lecture halls) and in the *MBLab* of the Leonardo building. The guest rooms of the AGH and GGH have active Ethernet sockets, but generally no cable. If needed, cables can be bought at the ICTP Mail Offices (LB and EFB) and at the vending machine at the entrance to the AGH cafeteria.

Wireless connections

You must have a valid ICTP account in order to use the wireless network. You should receive information about your account from the secretary during registration.

Windows XP: Service Pack 2 must be installed. Open *Control Panel*, select *Network Connections*, right-click on the wireless connection and choose *Properties*. Activate the central tab named *Wireless networks* and *Add* one named (or, if already in the list, edit its *Properties*). *Network Authentication* is **WPA** (if this choice does not exist then you have to update the driver of your network card), *Data Encryption* is **TKIP**. Next, click on the central tab, *Authentication*. *EAP Type* should be Protected EAP (**PEAP**). Deactivate the two check boxes on the bottom half of the dialog box. Click on *Properties* and deactivate *Validate server certificate* (we suggest to instead check the fingerprint of the server later on). Make sure that the selected *Authentication Method* is Secured Password (**EAP-MSCHAP v2**) and click on *Configure*. Deactivate the check box. Close all the dialog boxes by clicking their OK buttons and wait a few seconds. A bubble should pop up in the lower right area of the Windows screen asking you to provide your credentials. Click on the bubble and enter your ICTP user name and password, leaving the domain field empty. After a few seconds you should be connected.

Mac OS X 10.3: Click on the AirPort menu icon on the top of your display (it's formed like a pie). Make sure the Air Port is turned on and activate *Use Interference Robustness*. Click on *Open Internet Connect*. From this program's File menu, choose *New 802.1X Connection* (note: this option is not available in OS versions prior to 10.3). Choose *Edit Configurations*, enter your ICTP user name and password and select the network. PEAP must be the only selected *Authentication* protocol. Click OK to close the open windows and try to connect. When asked about certificates, compare the fingerprints with those published on our web site (see link list at the end of the document) and tell the OS to always accept them.

Mac OS X 10.4: Access to the wireless network is even simpler in OS X 10.4. Just make sure the AirPort is turned on, select *ictp-secure* and provide your user name and password when asked.

Linux: The configuration usually requires manual editing of configuration files. We suggest to follow the indications from the page <http://scs.ictp.it/howto/linux-secure.html>.

Web browser configuration

If your web browser (or Operating System) is configured to automatically detect the network settings then with a bit of luck you don't have to modify anything. On the other hand, if you cannot see external web pages but only those of the ICTP (e.g. <http://www.ictp.it/>)—or not even those—then please look for your proxy settings. How to get there depends very much on the browser and the Operating System. With Internet Explorer, click on *Tools, Internet Options*, the *Connections* tab, and the *LAN Settings* button. With Safari, go to the *System Preferences, Network*, make a *New Location* (name it) and for *Ethernet* and/or *AirPort*, select the *Proxies* tab. For other browsers, select *Edit/Preferences* or *Options* etc., and look out for keywords like *Advanced, Proxies* or *Connection Settings*.

The best option to try is to **automatically detect the settings** (except for Safari where it is not available). If it works, you can usually keep it this way even when you leave the ICTP.

The next best option is the use of an automatic proxy script, namely <http://wpad.ictp.it/wpad.dat>. If it doesn't work, use a manual setting where you type in proxy.ictp.it as host name and **3128** as port number. When you try the various possible settings, make sure that at any moment only one option is activated. Otherwise a non-working option might overrule a functional one and you will have difficulties sorting things out.

Remember that the last two options will definitely not work when you are outside the ICTP, so you have to return to your previous configuration when you leave the ICTP.

Mail program settings

There are several protocols for receiving e-mail (mainly POP and IMAP) and one for sending (SMTP), and each has an unencrypted and a secure version. The ICTP firewall allows receiving e-mail in either mode, but sending only with encryption on.

If you cannot send e-mail, try enabling SSL for sending (SMTP), using port 465. If it does not work, try using smtp.ictp.it as SMTP server. Before inserting this address, write down your previous setting. You will need to use SSL and authentication with your ICTP user name and password.

VPN

Virtual Private Networks usually work from within the ICTP. If you are allowed to modify the transport settings, choose TCP rather than UDP. UDP only works with ports 7000-7009.

If your VPN configuration does not work and you are not allowed to change it then try working without it, using secure connections for e-mail and any other service.

Troubleshooting

In case of problems, do not hesitate to contact us. Help is available from ICTS, internal telephone 999.

Web resources

http://icts.ictp.it/	Information & Communication Technology Section
http://icts.ictp.it/howto/wireless.html	“How to...” section on wireless networks
http://icts.ictp.it/faq/security.html	Fingerprints of ICTP secure servers
http://portal.ictp.it/	Main portal for the ICTP community