

## Recommended software for hands-on laboratories of the lesson **"Digital maps and Geographical Information Systems"**

It would be advisable to prepare your PC and smartphone in this way (one per group if you work in groups):

-) on the laptop, install qGis. I use the 2.8.6-Wien version, which is the standard for Ubuntu 16.04 ("sudo apt install qgis"). The software is also available for Windows / Linux / Mac, and you can download it from <https://download.qgis.org/>. The current version is the 3.0, but it would be better to use all the 2.8. Find the old versions at <http://download.osgeo.org/qgis/>. Select your operating system and version 2.8. If you know how to use a virtualBox virtual machine, there is one (DHSS18.ova) in the tutorial material at <http://tinyurl.com/gisdhss18>.

-) install the "OpenLayers" plugin in qGis. You must be connected to the Internet to download and install the plugin. Start qGis, and select the "Plugins" menu and the "Manage and install plugin ...". In the new window, check that "All" is selected on the left, then in the search box at the top, type "OpenLayers Plugin". The plugin will be displayed. Select it and then click "Install plugin". In the "Web" menu there is now "OpenLayers plugin".

-) simplify the qGis desktop. In the "View" menu select "Toolbars". Remove all ticks (off) all bars, except "Map Orientation". Still in the "View" menu, select "Panels" and check only "Layers" and "Layer order". On the desktop, it should remain a single line with a dozen of buttons at the top, and two frames at the side ("Layer order" and "Layers")

-) install the geoPaparazzi app on your smartphone. By HydroloGIS S.r.l., version 4.4.

-) bring a USB cable with you to connect your smartphone with the PC (data transfer). Recharge your smartphone and wear comfortable shoes.