During the seminar, participants will be trained to the use of all or part of the following software, with respect to the hands-on experience.
If you are not sure on which version to download, please kindly download them all to your computer (or to a memory stick) to be ready for installation during the workshop.

Please be reminded that the workshop has a practical part outdoors, where you will be asked to collect photographs for a complete 3D reconstruction of an item of Cultural Heritage. So make sure you have laptop and camera (and required cables and card-readers) with you.

* Agisoft Metashape
Previously known as Photoscan, Agisoft Metashape is a stand-alone software product that performs photogrammetric processing of digital images and generates 3D spatial data to be used in GIS applications, cultural heritage documentation, and visual effects production as well as for indirect measurements of objects of various scales. Agisoft provides a free 30-days full license for the use of the Pro version, which users can activate at first use (we suggest to install it and start it according to the workshop program on Friday).

Links for the various available versions:
Windows x64 - http://download.agisoft.com/metashape-pro_1_6_3_x64.msi
Windows x32 - http://download.agisoft.com/metashape-pro_1_6_3_x86.msi
Mac OS - http://download.agisoft.com/metashape-pro_1_6_3.dmg
Linux - http://download.agisoft.com/metashape-pro_1_6_3_amd64.tar.gz

* CloudCompare
3D point cloud and mesh processing software (Open Source Project).
Windows x64 -
https://www.danielgm.net/cc/release/CloudCompare_v2.11.0_setup_x64.exe
Windows x32 -
https://www.danielgm.net/cc/release/CloudCompare_v2.6.2_setup_x86.exe
(note that the last version of CC at 32bit is 2.6.2, instead the 64bit is 2.11).
Mac OS - https://asmaloney.com/download/cloudcompare-mac-os-x/
Linux - [*Now thanks to Alberto Mardegan (and Romain Janvier), there is a "universal" snap package for Linux. On Ubuntu, starting from version 16.04 it's as simple as typing "snap install cloudcompare". On other distributions, you may need to install snap first (please refer to the corresponding documentation if necessary).*]

* Faro Scene 2019
Professional software for the download and processing of point-clouds generated (mainly) with Faro laser scanners.
Combining ease-of-use and an enhanced 3D experience to deliver a complete scan processing solution, SCENE has the ability to generate high-quality, colorized data very quickly, while providing the tools for real time, on-site registration, automated scan positioning, scan registration, and positioning. SCENE is specifically designed for all Focus, Freestyle and third-party laser scanners.

///THIS SOFTWARE IS NOT MANDATORY FOR THE WORKSHOP///
The workshop is mainly focused on photogrammetry and the laserscanner, for economy of time, will only be presented on screen. Nevertheless, those who are willing to try the software in practice, can register and download the 30-days trial of Faro SCENE at
https://3d-apps.faro-europe.com/product/scene-trial/

* Google Earth
Please make sure to have access to the following link
https://earth.google.com/web
and to be able to load a kml file (Project > Open > Import KML file from computer). This is sufficient for the purposes of the workshop. If you experience problems, you will be assisted on this during the workshop.

Please make sure to have the download cable or card reader needed to get the photographs you will collect with your own camera. And of course, double check to have enough free space on your laptop to store images and the required pieces of software.

For further information about the workshop
and the above software, please contact
Gianluca Cantoro - gianluca.cantoro@gmail.com