

## **3D photogrammetry and virtual outcrop models**

Prof. Stefano Tavani

12 hours – 3 CFU

### **Short Program of the Course:**

- Mathematical, geometrical, and physical fundamentals of multi view photogrammetry. Photogrammetric systems and procedures for terrestrial and aerial photogrammetry. Positioning systems and use of ground control points for scaling and orienting models. Outcomes: point clouds and textured meshes. Geological interpretation tools (2 hours)
- Real case photo acquisition (2 hours)
- Data processing and virtual outcrop model building via Photoscan (4 hours)
- Virtual outcrop model interpretation (4 hours)