

## DAVID ROSSI

Degree (1997) in Structural Geology and Geological survey.

In 2002 he achieved his PhD in the Sapienza University of Rome. The main topics of his dissertation were the Reconstruction in 2D and 3D of complex geological structures, using structural and stratigraphical field data, and analogue models.

From the 1999-to present, his research activity involved problems concerning the environment and the relationships between geological complexity and ecosystems fragility.

From July 2011 is a Researcher at the IRSA-CNR.

Specialties:

- Hydrologic and hydro geologic dynamics;
- Pollutants diffusion processes within complex geological structures, for a sustainable use of water resources;
- Impact of withdraw strategy of superficial water resources;
- Bracciano lake bathymetry using single and multibeam echo sounder tools;
- Self-purification processes changes of freshwater Lakes linked to climate change;
- Mapping in 2D and 3D of water body using echo sounder single beams and multi beams with manned and unmanned hydrographic vessels;
- Experience in hydrographic campaign in extreme environments up to 79°N parallel;
- Field hydrographic surveys to compute lake bathymetry and Volumes;
- Determine the spatiotemporal variability in lake water quality, equipping the USV with a multiparametric probe;
- Measure the thickness of the lake bed sediments;
- 3D volumetric reconstruction of the sediments overlapped to the bathymetry;
- Produce detailed maps of chlorophyll and nutrient concentrations in lakes.