

# 18/01/18 DIST LUNCH SEMINAR

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## Ecosystem functions modeling

### ABSTRACT

The ecosystems provide drinking water and food, just to mention two of the main services. In order to quantify the ecosystem services, it is necessary to quantify the ecosystem functions that are linked to them. We can compare ecosystems to the human body. A set of functions take place inside it, without we often care about them, but such functions are strictly necessary for all our actions.

Therefore one hundred and fifty years of research about soil and vegetation is becoming very useful in this frame. This knowledge capital has been extraordinarily boosted by the increase of computing power and by new experimental tools.

A new model have been developed at LABFLUX to quantify the water cycle at the regional scale and to compare the results with the existing measurements. The interannual variability is the more striking feature of the water cycle and new strategies are necessary in order to guarantee water and food in the future, in a more complex and crowded world.



Also, in order to quantify the ecosystems functions, an experimental site has been built in the Gran Paradiso National Park , and modeling of food growth is also performed.

### BIOGRAPHY

2016-2018

PI - Research Project funded by SMAT "Climate change impact on drinking water supply"

2013-2016

Co-investigator – Research Flag Program CNR NEXTDATA – NEXTSNOW

2007-2009

National coordinator – Research Project PRIN 2007 "Soil-vegetation-atmosphere interaction processes and numerical modeling of their response to climate change", funded by the Italian Ministry of Research

2006-2007  
PI Italian Unit – Research Project "Bio-physics of the soil-root interface", funded by the British Research Council

1996-2000

PI Italian Unit – Research Project "Water management for non closed crop production", funded by the European Union

Thursday

18/01/2018

h. 13,00 - 14,00

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