Welcome to a cross-disciplinary course!

**Soil properties and processes**
that control transport, cycling, speciation and bioavailability of elements or molecules

The methods of soil analysis at multiple scales ranging from global to atomic

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**Tentative Program**

**Sunday 26th June**
Arrival

**Monday 27th June**
Introduction to the summer school

**Lectures**
Soil landscape analysis and landform mapping
An overview of the soils of the Trentino and Lagarai Group
Can geo-spatial decision support systems be a valuable tool for soil and landscape management?
Pest bags as natural archives of human activity and environmental changes throughout centuries
Are human forms, mesofauna and microflora in subalpine forest soils sensitive to thermal conditions?
Environmental SEM and microanalysis applications in soil and geomicrobiological studies
Exploring soil microbial diversity and functions through Geochip microarrays and Next generation Sequencing (NGS) approaches

**Discussion**

**Thursday 28th June**

**Lecture**
Soil survey: how to describe a soil profile

Field trip to Monte Mezza and Malga Cavallara: spatial variability of soils, soil formation on granite and evidence for climate change

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**Wednesday 29th June**

**Lectures**
Mineralogy and Related Properties of Forest Soils
The rhizosphere as a driving force for pedogenesis
Fire as a soil forming factor
The interplay between measurements and processes - at different scales - in soil hydrology
Soil characteristics in snow avalanche sites
Soil aggregation, erodibility, and aggregate-C relationships in mountain soils
Advanced methodology to investigate soil organic carbon dynamics
Soil carbon dynamics in a changing environment: monitoring activities in the Trentino Region

**Discussion**

**Thursday 30th June**

**Lecture**
Climate and vegetation change: effect on mineral weathering in alpine soils

Conclusion: putting it all together.
Visit to Museum of Science (MUSE, Trento)

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**How to apply:**
The Application form is available at the SENSFOR website: http://www.sensfor-cost.eu/

Please send the registration form filled in, signed, and scanned, to sbrat@vtb.bg, oddvar@nmuskre.no and marinari@unitus.it by 15 February 2016.

15 SensFor COST Action grants will be available covering max 160€ per day for trainees. For all other participants supported by the Italian Society of Soil Science, the reduced registration fee (70 euro) is due before 15th April 2016.

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**Registration**

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