

2019 IEEE INTERNATIONAL WORKSHOP ON

# METROLOGY FOR AGRICULTURE AND FORESTRY



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**PORTICI – ITALY** University of Naples Federico II Department of Agricultural Sciences



For the special session on:

WHAT REQUIREMENTS FOR "PRECISION MEASURING" ARE EXPECTED IN SMART AGRICULTURE AND FORESTRY APPLICATIONS?



Precision- Agriculture and Forestry have opened new frontiers in business management. They pose the need for new generations of information systems, specifically tailored to the management of "land mobile processes", where decisions derive from information often originating not from "measured data" but normally from "interpreted data" (when not even "estimated").

In this context, the concept of "measurement precision" takes on entirely new connotations, given that it no longer has an absolute value, but must be constantly calibrated on the decision-making objectives of the enterprise.

What are the real requirements of precision in management activities? How can these requirements influence production efficiency, production costs and product quality? What are the measuring precision needs to make a traceability target reliable? And which ones for a certification target? How to scale the concept of precision at the different territorial scales of investigation (land, farm, field/parcel, plant)? Is it possible to identify a common methodological approach in the various application domains of agri-environmental companies?

The session is open to all researchers and professionals who can contribute, through their experiences and points of view, to lay the foundations for an interdisciplinary clarity on these issues.

ORGANIZERS



#### Fabrizio Mazzetto

Free University of Bozen/Bolzano, Italy

fabrizio.mazzetto@unibz.it



## Claudio Gandolfi

University of Milan, Italy

📣 claudio.gandolfi@unimi.it

#### WORE INFORMATION www.metroagrifor.org info@metroagrifor.org



We welcome contributions that:

- propose a classification methodology for measure precision according to a specific domain of interest and related decisional needs;
- provide suggestions on monitoring practices to be integrated into information systems;
- describe precision approaches for land and environmental monitoring at different scales;
- report on precision needs in the different certification fields of interest for the agriculture and forestry sectors (machines, plants, products, processes etc.);
- provide a methodological approach to deal with precision in automated site-specific operations;
- report on peculiar aspects of measurement problems on their own domain of interest and related farming systems (arable farms, orchards, forestry, livestock) or specific related operations (spreading, irrigation, harvesting etc.).



### Pasqualina Sacco

Fraunhofer Italia IEC, Italy

pasqualina.sacco@fraunhofer.it



#### Massimo Lazzari

University of Milan, Italy

📣 massimo.lazzari@unimi.it



Rino Gubiani

University of Udine, Italy

承 rino.gubiani@uniud.it