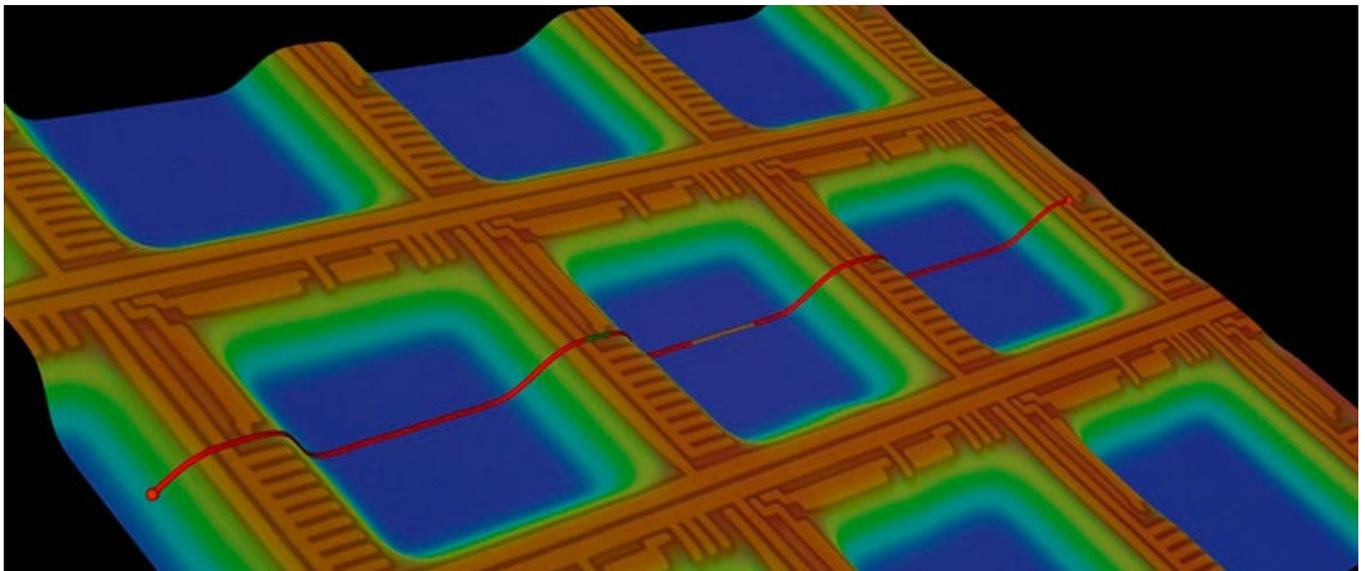


MENELAOS_NT: Multimodal Environmental Exploration Systems – Novel Technologies



Descripción

MENELAOS_NT addresses the ever more significant problem of scientifically and technologically sensing and exploring “the world” on micro- and macroscopic scale to provide scientists with deeper insights and better understanding in order to predict and possibly control critical evolutions. This would support decision makers with more sophisticated and reliable information for deciding on sustainable measures. Essentially the project addresses societal key challenges, e.g., sustainable agriculture and forestry, bio-economy, environmental changes, resource efficiency as well as protecting freedom and security of the European society. Covering the complete chain of information generation plays a key role here, and forms a key future market with huge potential, ensuring excellent career perspectives for early stage researchers. The continuously increasing sensitivity and resolution of remote sensing, and the steadily growing range and field of view of short and medium range 2D/3D-sensorics are closing the gap between analyzing unknown scenarios from outside (remote) and from within (in-situ), however, at the cost of increasing data dimensionality and volume (“Big Data”), raising the urgent need of detecting and isolating relevant information from the ubiquitously present noise and disinformation. MENELAOS_NT addresses multi modal – multi sensor fusion to optimally combine the information, delivered by different sensors (in situ/remote, optical/non optical) on different scales, with different resolutions and with different reliability. New and intelligent (Compressive Sensing, Analogue to Information Conversion) approaches will be indispensable for this, hence MENELAOS_NT develops this complex and interdisciplinary field by combining high level scientific research and excellent doctoral training, fostering a new generation of young researchers, familiar with the necessary theoretical framework and at the same time skilful and diverse enough to advance the society.

INVESTIGADORES

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DETALLES

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<https://www.menelaos-nt.eu/>

Consortio

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CITIUS

PROGRAMAS CIENTÍFICOS

Dispositivos semiconductores e sensores autónomos