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Detecting vineyard diseases using high-resolution images acquired by airborne platforms

Images acquired from aircrafts also integrate with satellite-based remote sensing allows for high-resolution data collection essential for ecosystems monitoring and risk management. This approach, combined with Artificial Intelligence (AI) algorithms serves as a reliable tool for the calibration and validation of satellite-derived data and ensures ground-truthing capabilities for more accurate data interpretation. In this talk, we present machine learning algorithms used to automatically analyze centimetric resolution images acquired by airborne experimental platforms for detecting vineyards diseases. The potential of the combined use of multispectral satellite imagery for symptom detection will also be discussed. In this framework, the use of high-performance computing resources is pivotal, accelerating image analysis for early symptoms detection and enabling early warning systems.

Giorno preferito

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Primary authors: STRATI, Virginia (Istituto Nazionale di Fisica Nucleare); ALBÉRI, Matteo (University of Ferrara & INFN Ferrara); CHIARELLI, Enrico (University of Ferrara & INFN Ferrara); FRANCESCHI, Michele (University of Ferrara & INFN Ferrara); MAINO, Andrea (University of Ferrara & INFN Ferrara); MANTOVANI, Fabio (University of Ferrara & INFN Ferrara); RAPTIS, Kassandra Giulia Cristina (University of Ferrara & INFN Ferrara); PIPARO, Giuseppe (University of Catania & INFN Catania); TRICOMI, Alessia (University of Catania, INFN Catania and Centro Siciliano di Fisica Nucleare e Struttura della Materia CSFNSM, Catania); ANASTASI, Gioacchino Alex (University of Catania & INFN Catania)

Presenter: STRATI, Virginia (Istituto Nazionale di Fisica Nucleare)