



# Coding Theory and Cryptography Meetup

Dipartimento di Matematica e Fisica — October 2023, 31<sup>th</sup>

*Coding theory and cryptography both share a fundamental objective: ensuring the integrity and security of data. This research event aspires to create a collaborative platform for Master's and PhD students, academics, and industries.*

*The main goal is to delve into the intricate world of algebraic and geometric methodologies and their contemporary applications in the development of error-correcting codes and the formulation of robust cryptographic systems.*

*By uniting minds from academia and industry, this gathering aims to foster a comprehensive understanding of how advanced mathematical concepts can be used in reliability and secrecy of information in an increasingly interconnected world.*

## Invited speakers

**Giovanni Giuseppe Grimaldi** (University of Naples "Federico II")  
*A geometric construction of a family of non-linear MRD codes*

**Valentino Smaldore** (University of Padova)  
*Stabilizers of graphs of linear functions and rank-metric codes*

**Antonina Khramova** (TU/e Eindhoven University of Technology)  
*Eigenvalue bounds for sum-rank-metric codes*

**Maria Ferrara** (University of Campania "Luigi Vanvitelli")  
*Algebra and Real Life: Tools for Ensuring Privacy*

**Carmine Monetta** (University of Salerno)  
*Group-based primitives*

**Annamaria Iezzi** (University of Naples "Federico II")  
*On an open problem in isogeny-based cryptography*

## Industrial session

**STMicroelectronics**  
*Secure element technology and Cryptography*

**Bit4id**  
*Challenges for QTSPs in the Quantum Computers Era*

## Organizers

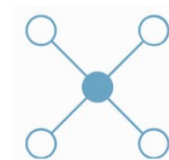
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**COMBINE**



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Matematica e Fisica*