



# De Cifris Schola Latina



**Wednesday 26th February 2020 – at 3:00 p.m.**  
**Roma Tre University**  
**Room 311, Department of Mathematics and Physics**

**ROBERTO CIVINO**  
Università de l'Aquila

**Differential attacks using alternative operations**

**Abstract:** Block ciphers and their security are the main subjects of this seminar, where it is described the impact of differential cryptanalysis, a powerful statistical attack against block ciphers, when operations different from the one used to perform the key addition are considered on the message space. It is proven that when an alternative difference operation is carefully designed, a cipher that is proved secure against classical differential cryptanalysis can instead be attacked using this alternative difference.

**Contact person:** Marco Pedicini

**Address:** Room 311, Building C, Roma Tre University  
Largo San Leonardo Murialdo 1, Roma

#### CONTATTI

Associazione De Componendis Cifris

[direttore@decifris.it](mailto:direttore@decifris.it)

[segreteria@decifris.it](mailto:segreteria@decifris.it)