UNIVERSITÀ DELLA CALABRIA

DIPARTIMENTO DI **MATEMATICA E INFORMATICA**

Ph.D. programme
in Mathematics and Computer Science -The XXXV Cycle

Date: June 8th - 11th 2020, 9:00 – 12:00 am

CLASSIC ALGORITHMS: PAST, PRESENT AND FUTURE

SPEAKER *Annarosa Serpe* - University of Calabria

ABSTRACT - The course offers an historical background to algorithmic practice. Specifically, it focuses attention on the structure of Euclid's algorithm which often represents for mathematical the prototype of the algorithmic procedure and that has relevance to date.
Euclid's algorithm can be useful not only in the search for the greatest common divisor -as described from Euclid himself- but also, by adapting the procedure, in the solution of indeterminate equations, which leads to the identity of Bézout.
This algorithm allowed al-Khwarizmi (ca 780 - ca 850) to compare two ratios, or to prove that they were the same; all this appears even more clearly in the writing of the continuous fractions which have been systematically studied by Euler.

Microsoft Teams

https://teams.microsoft.com/l/team/19%3a72022c138e2a4d32b334f40c4223bf45%40thread.tacv2/conversations?groupId=cc28a257-5b5b-47ea-a107-