PH.D. IN MATHEMATICS AND COMPUTER SCIENCE

COURSE SCHEDULE

ACADEMIC YEAR 2022/2023

AN INTRODUCTION TO GPGPU PROGRAMMING IN CUDA

LECTURER: DONATO D'AMBROSIO
UNIVERSITY OF CALABRIA

6 -9 MARCH

NVIDIA CUDA IS CURRENTLY ONE OF THE MOST DIFFUSE TECHNOLOGIES AND PROGRAMMING MODELS FOR GENERAL-PURPOSE COMPUTING ON GRAPHICS PROCESSING UNITS (GPGPU), REPRESENTING ONE OF THE BEST OPTIONS TO SPEED UP COMPUTER APPLICATIONS IN VARIOUS SCIENTIFIC FIELDS, INCLUDING NUMERICAL SIMULATION, ARTIFICIAL INTELLIGENCE, AND DATA SCIENCE. THIS COURSE PROVIDES AN OPERATIVE INTRODUCTION TO CUDA BY SIMPLE EXAMPLES. IT ALSO ILLUSTRATES THE PARALLELIZATION OF THE SCIDDICAT CELLULAR AUTOMATON, A SIMPLE BUT EFFECTIVE COMPUTATIONAL FLUID DYNAMICS (CFD) MODEL FOR LANDSLIDES SIMULATIONS.

CLASS SCHEDULE:

MON 06/03   09:00 – 12:00

TUE 07/03   09:00 – 12:00

WED 08/03   09:00 – 12:00

THU 09/03   09:00 – 12:00

- **CLASSROOM MT 10**

- **ONLINE: HTTPS://MEET.GOOGLE.COM/FFV-RUEE-CPR**