

ONLINE WORKSHOP | FREE REGISTRATION | 29-31 JULY 2020

# GROUND PENETRATING RADAR MODELLING USING GPRMAX

## PROGRAMME - DAY 1 - WEDNESDAY 29.07.2020

TIME (BST)	SESSION TYPE	SPEAKER(S)	AFFILIATION	TITLE
0930 – 1000	WELCOME			
1000 – 1100	FUNDAMENTAL CONCEPTS (PART 1)	<u>DR ANTONIS GIANNOPOULOS</u>	UNIVERSITY OF EDINBURGH (UK)	MAXWELL'S EQUATIONS ON A GRID. THE YEE CELL AND THE BASICS OF THE FINITE-DIFFERENCE TIME-DOMAIN METHOD.
1100 – 1115	MORNING BREAK			
1115 – 1230	FUNDAMENTAL CONCEPTS (PART 2)	<u>DR ANTONIS GIANNOPOULOS</u>	UNIVERSITY OF EDINBURGH (UK)	MAXWELL'S EQUATIONS ON A GRID. THE YEE CELL AND THE BASICS OF THE FINITE-DIFFERENCE TIME-DOMAIN METHOD.
1230 – 1330	LUNCH BREAK			
1330 – 1500	WORKSHOP	<u>DR CRAIG WARREN</u>	NORTHUMBRIA UNIVERSITY (UK)	AN INTRODUCTION TO GPRMAX AND A FIRST SIMPLE MODEL
1500 – 1515	AFTERNOON BREAK			
1515 – 1600	PRESENTATION	<u>DR NECTARIA DIAMANTI</u>	ARISTOTLE UNIVERSITY OF THESSALONIKI (GREECE)	GPR NUMERICAL MODELLING PERSPECTIVES FROM INDUSTRY

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## PROGRAMME - DAY 2 - THURSDAY 30.07.2020

TIME (BST)	SESSION TYPE	SPEAKER(S)	AFFILIATION	TITLE
0930 – 1000	WELCOME			
1000 – 1020	PRESENTATION	<u>DR CRAIG WARREN</u>	NORTHUMBRIA UNIVERSITY (UK)	NEW GPRMAX V.4 RELEASE - API, SUB-GRIDDING, LANDMINE LIBRARY
1020 – 1100	WORKSHOP	<u>DR CRAIG WARREN</u>	NORTHUMBRIA UNIVERSITY (UK)	NEW API FOR ADVANCED USERS
1100 – 1115	MORNING BREAK			
1115 – 1145	WORKSHOP	<u>DR ANTONIS GIANNOPOULOS</u>	UNIVERSITY OF EDINBURGH (UK)	SUB-GRIDDED MESHES
1145 – 1230	Q+A SESSION - A CHANCE TO ASK YOUR QUESTIONS			
1230 – 1330	LUNCH BREAK			
1330 – 1400	PRESENTATION	<u>DR ANDREAS KATHAGE &amp; ANDRÉ BREDECK</u>	GEOHIRES INTERNATIONAL GMBH (GERMANY)	A GUI FOR 2D GPRMAX MODELS
1400 – 1430	PRESENTATION	<u>DR IRAKLIS GIANNAKIS</u>	UNIVERSITY OF ABERDEEN (UK)	SIMULATING COMPLEX MATERIALS
1430 – 1500	PRESENTATION	<u>MISS RANIA PATSIA</u>	UNIVERSITY OF EDINBURGH (UK)	SIMULATING REAL GPR ANTENNAS USING MULTI-PARAMETRIC OPTIMISATION SCHEMES
1500 – 1515	AFTERNOON BREAK			
1515 – 1600	PRESENTATION	<u>MR PHILIPP KOYAN</u>	UNIVERSITY OF POTSDAM (GERMANY)	3D GPR DATA SIMULATED ACROSS A REALISTIC SEDIMENTARY MODEL: MODELLING, ANALYSES AND APPLICATIONS

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# GROUND PENETRATING RADAR MODELLING USING GPRMAX

## PROGRAMME - DAY 3 - FRIDAY 31.07.2020

TIME (BST)	SESSION TYPE	SPEAKER(S)	AFFILIATION	TITLE
0915 – 0930	WELCOME			
0930 – 1000	PRESENTATION	<u>DR CRAIG WARREN</u>	NORTHUMBRIA UNIVERSITY (UK)	SPEED UP YOUR SIMULATIONS WITH OPENMP, MPI, AND CUDA
1000 – 1100	WORKSHOP	<u>DR IRAKLIS GIANNAKIS</u>	UNIVERSITY OF ABERDEEN (UK)	MACHINE LEARNING USING SYNTHETIC TRAINING DATA
1100 – 1115	MORNING BREAK			
1115 – 1145	PRESENTATION	<u>DR IRAKLIS GIANNAKIS</u>	UNIVERSITY OF ABERDEEN (UK)	NUMERICAL MODELLING FOR LANDMINE DETECTION
1145 – 1230	PRESENTATION	<u>DR ANTONIS GIANNOPOULOS</u>	UNIVERSITY OF EDINBURGH (UK)	PERFECTLY MATCHED LAYER (PML) ABSORBING BOUNDARIES
1230 – 1330	LUNCH BREAK			
1330 – 1400	PRESENTATION	<u>DR ANJA KLOTZSCHE &amp; MISS JESSICA SCHMÄCK</u>	FORSCHUNGSZENTRUM JÜLICH (GERMANY)	GPR FULL-WAVEFORM INVERSION FOR GEOPHYSICAL INVESTIGATIONS
1400 – 1500	OPEN DISCUSSION - NEXT GPRMAX FEATURES/TOOLS, NEW APPLICATION AREAS, USER FEEDBACK, DEVELOPING THE GPRMAX COMMUNITY			

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