2 POSTDOCTORAL POSITIONS IN APPLIED MATHEMATICS

2 Postdoctoral positions funded by the ERC Starting Grant ADAPTIVES will be available as of December 1st 2013 (the starting date is flexible) at IACM-FORTH in Crete under the supervision of Dr. Chrysoula Tsogka.

POSITION  Two postdoctoral - 2 year positions, with a salary of 28,000 €/year.

REQUIREMENTS  Expertise in numerical computations, imaging and inverse problems in the area of wave propagation.

THE PROJECT

Algorithmic Development and Analysis of Pioneer Techniques for Imaging with waVES

Waves are being used for the detection and imaging of objects for many years. We all know the radar, which uses electromagnetic waves, the sonar that is based on acoustic waves, and medical ultrasound. Other applications concern seismic imaging, i.e., imaging of the subsurface geological formations, and non-destructive testing of materials. In most of these applications the materials encountered in practice are often complex and their properties are not known - and cannot be estimated - in every detail. We, therefore, model the propagation medium as a random process for which we know some statistical properties. Our goal is to solve the imaging problem in a regime where multipathing due to the heterogeneities is important. The challenge is to produce reliable, i.e., statistically stable, results, especially when there is no a priori knowledge about the propagation medium.

IACM-FORTH

The Foundation for Research and Technology-Hellas (FORTH) is one of the top European research centers. It has been ranked 1st in terms of high impact publications in Greece and 12th in the number of FP7 grants in Europe. Since the establishment of the ERC grant scheme in 2007, a total of 24 scientists working in Greek Institutions have been awarded with such prestigious grants and 6 of them are located in Institutes of FORTH.

The Institute of Applied and Computational Mathematics (IACM) at FORTH is the only institute of Applied Mathematics in Greece. The successful research activity of IACM is documented by the numerous research contracts it has attracted, the quality and impact of research publications of its members and the success of the international scientific meetings they have organized.

TO APPLY  Candidates that match the required profile will be continuously interviewed until the positions are filled. Candidates should send a CV and two (2) reference letters to tsogka[at]iacm.forth.gr. Recommendation letters should be sent by the referees.