

*Scientific Statement - Dr. Emanuela Matrullo
February 28nd, 2013*

Dear Prof. Dr. Heiner Igel,

I am writing you to introduce myself and to let you know of my interest in applying for the postdoctoral positions in geophysics/seismology to become part of your team.

I am currently a postdoctoral researcher at the Geology Department of the Ecole Normale Supérieure in Paris, where I start to study the seismic source parameters of the seismicity of the Corinth Rift (Greece). My fellowship is financed by the European Project REAKT (<http://www.reaktproject.eu>), and is supervised by Dr. Hélène Lyon-Caen and Dr. Pascal Bernard.

Before taking this position, I have worked at the Seismology Research Group at the Department of Physical Sciences, University of Naples Federico II, denoted as RISSC-Lab (<http://www.rissclab.unina.it>) of prof. Aldo Zollo. I defended my Ph.D. thesis in Geophysics "Fault delineation and stress orientations from the analysis of background, low magnitude seismicity in Southern Apennines (Italy)" on March 16th, 2012 at the University of Bologna.

My research interest is oriented on observational and applied Seismology. In particular the aim of my research activity is oriented on the study of the background seismicity and the definition of the stress regime in active fault systems. During my PhD I focused my research on the signal analysis of seismic data recorded by ISNet network (Southern Apennines), data formatting and archiving, earthquake location, structural and seismo-tectonic modeling, velocity model of seismic body waves, focal mechanisms and stress field determination. Furthermore I have contributed in the Geiser Project in data analysis of induced seismicity in the Geysers Geothermal area in Northern California. Actually, I am interested in the study of source parameters and of anelastic attenuation of the Corinth Rift (Greece) through the inversion of displacement spectra of P and S waves and from the analysis of coda waves.

During my Ph.D. program I collaborated with many heterogeneous and multicultural research groups (seismologists, geologists, geophysicists, etc.) in Italy and in foreign country. Moreover, I obtained the fellowship "Marco Polo" of the University of Bologna "Alma Mater Studiorum" to work for 3 months at Institut de Physique du Globe - EOST (Strasbourg University) with Prof. Luis Rivera on the topic "Stress inversion from initial polarities of a population of earthquakes." Prof. Rivera expressed a favorable opinion on my job stressing in the final judgment: "Miss Matrullo was extremely motivated and efficient. She was very fast in understanding the problems and finding the solutions. It was a great pleasure for us to have her in our laboratory during this period." In addition, during my PhD and the PostDoc, I have collaborated in several national and European projects (DPC-INGV_S5, ReLUIS, GEISER, Reakt, NERA).

I am a very friendly and open-minded person, with a positive can-do attitude. I have good analytical problem solver skills supported by knowledge of different OS, programming language and many scientific software for data analysis and presentation.

I like to work in groups in a multicultural environment but I am also able to work individually if required. I have attitude to analyzing and identifying the different elements of a problem, by relating and mapping directions for action. I work well under pressure and I have the capability in providing an excellent service also in a very busy environment. I am able to communicate by expressing my ideas in a clear, concise and effective way, especially knowing how to hear the perspective of the interlocutor.

For these reasons, I think I would be a suitable candidate for this position.

Sincerely,

Emanuela Matrullo