

3rd International Forum on High Energy Geophysics:
Muon and Neutrino Radiography
(March 9, 2010 Tokyo, Japan)

The first workshop on “High Energy Earth Science: Muon and Neutrino Radiography” was held in Tokyo on June 26–27, 2008. The Tokyo Workshop clearly showed that geophysics has now in its hands a new, powerful technique for investigation. In particular, the applications of muon radiography are likely to expand in the near future because of its unique imaging capability and of the space resolution much higher than with conventional techniques.

The MU-RAY Workshop was held in Naples on September 11–12, 2008. Driven by the enthusiasm for a further development of the new technique and for the extension of its applications, it took place only a few months after the Tokyo Workshop. It has been its natural follow with the purpose of extending the discussion on ongoing programmes and on future projects. In particular, the attention has been on the design of new detectors based on the experience gathered for Particle Physics and suitable for muon radiography of volcanoes.

The present workshop is devoted to addressing the main current issue in this research area to form a research network aimed at fostering scientific collaboration on muon physics, neutrino physics and geophysics. The project foresees a collaborative effort for the development of an electronic detector of greater sensitivity for the study of volcanoes.