

POSTDOCTORAL & Ph. D. POSITIONS

Seismic Interferometry & Imaging

University of Edinburgh, U.K.
Working with Prof. Andrew Curtis

Up to **two Postdoctoral** Research Associate (PDRA) and **two Ph. D.** positions are available at the University of Edinburgh, U.K., to work on *Seismic Interferometry* and its use in *Imaging Problems* on an industrially-sponsored 4-year research project.

Recently it has been shown that seismic interferometry is directly related to existing migration or imaging methods. Hence, new nonlinear imaging techniques have been proposed. PDRA's will research one or more of the following areas, collaboratively working to develop time-dependent, nonlinear imaging methods of the future:

- Detection and correction of interferometric errors caused by *directional bias* in passive noise and active source illuminating wavefields
- Discrimination of *temporal changes* in the Earth from temporal changes in illuminating wavefields
- Developing novel *wavefield modelling methods* based on recent developments in interferometric theory and applications
- Developing novel *nonlinear imaging methods* based on recent developments in interferometric theory and applications

Prerequisites

Postdoctoral candidates must have excellent **Mathematical** and **(Geo)Physics** skills, prior experience of **imaging** or **interferometry**, & good background in **wave theory**.

Ph. D. candidates will ideally be strong in two or more of these highlighted areas.

Applications

Initial appointments will be for 1 year with extension for up to three further years being contingent on progress reviews. Part-time appointments may be considered in exceptional cases.

A formal advertisement for these positions will be posted on the University of Edinburgh web site in January with a rapid closing date. Hence, if interested, **please send a Curriculum Vitae in advance** to Andrew.Curtis@ed.ac.uk