18-month post-doctoral position in numerical modeling of lithosphere mechanics and deformation - Université de Montpellier, France

We seek candidates for an 18-month position in numerical modeling of lithosphere deformation at the Geosciences Montpellier laboratory of Université de Montpellier, France. The candidate will have a recent PhD and experience in mechanical modeling, computational physics, or numerical analysis of mechanics of solid Earth or materials. The objectives are (1) to optimize and develop an existing 3-D finite-element code dedicated to mechanical modeling lithospheric and crustal deformation, and (2) to study recent deformation and seismicity in intraplate domains, particularly western Europe. This position is part of the SIGMA2 project DEFORM3D co-funded by EDF (Electricité de France) aiming to reveal the processes controlling the present-day deformation and seismicity in France. To this effect, a special effort will be put to numerical implementation and analysis of the processes that can trigger deformation (erosion, sedimentation, plate and mantle interactions) as well as the various rheologies that can account for strain concentration. Therefore, the candidate will have a good knowledge of the finite-element method and programming. A good understanding of the physical and mechanical processes as well as rheological laws associated with plastic and viscous deformation will be a strong asset.

The candidate will work at the Geosciences Montpellier laboratory at Université de Montpellier:
   http://www.gm.univ-montp2.fr/?lang=en
   http://www.gm.univ-montp2.fr/spip.php?rubrique69

She / he will be part of a working group including two PhD students and several geophysicists, numerical modelers, and geologists from Geosciences Montpellier, EDF-DIPNN laboratory in Aix-en-Provence, and Geoazur at Université de Nice - Sophia Antipollis.

Salary will be commensurate with experience (2100 - 2600 € / month net).

The position will be open from January 2018 and will stay open until filled. An earlier start date (novembre 2017) may be arranged.

Please send a CV, a letter of interest, and at least one reference letter to Stéphane Mazzotti (stephane.mazzotti@umontpellier.fr)