Post-doctoral position in solar physics at LESIA

The solar group of LESIA at Paris Observatory offers a two-year post-doctoral position to investigate one of the most challenging questions in solar physics: How do the small-scale processes developing in 3D flare current sheets impact the dynamics and energetics of large-scale coronal mass ejections (CMEs)? Answering this question is critical for understanding how CME's are initiated and how magnetic reconnection affects, if not controls, these explosive phenomena. In this context, the successful candidate will primarily work (1) on achieving realistic 3D line-tied MHD numerical simulations of CME triggering and development, at sufficiently high resolution to obtain the development of the tearing mode in 3D, (2) on analyzing its nature and its non-linear development, and (3) on quantifying its feedback on the eruption itself. The second aspect of the post-doc appointment will consist in confronting the simulation results with EUV and SXR observations from STEREO, SDO and Hinode. The successful candidate will work with G. Aulanier and S. Masson as well as E. Pariat and P. Démoulin. The monthly net salary ranges between 2230 and 2450 euros based on the number of years of experience after the PhD. The grant includes 6000 euros for travel. The candidate should hold a PhD in solar physics or equivalent. She/he should have a strong interest and skills in reconnection theory and numerical studies, and be concerned by the observational constrains. The application must include a CV, a list of publications, copies of degree diplomas, two reference letters, and statement of motivation.

Deadline for applying is October 15. Starting date can extend up to December 1, 2017. The application should be send to <u>guillaume.aulanier@obspm.fr</u> and <u>sophie.masson@obspm.fr</u>