Astrotomography is a generic term for indirect mapping techniques that can be applied to a huge variety of astrophysical systems, ranging from planets, through single stars and binaries to active galactic nuclei. This workshop will consolidate the success of the first astrotomography workshop in 2000, bringing together people from different communities who employ similar techniques to construct indirect images at very high angular resolution. Given the increase in scientific output of astrotomography methods and the wider range of applications, it is thus timely to review the methods, the progress in the field and the harvest of new results, as well as to prepare the next generation of astronomers to use these tools.

The broad themes to be covered by the meeting will be:
1. Methods: computational techniques such as maximum entropy and regularised fitting;
2. Astrotomography techniques and new developments: e.g., eclipse mapping, spectral disentangling, Doppler tomography and modulated Doppler tomography, Zeeman–Doppler mapping, interferometric Doppler imaging;
3. New instruments and possibilities: e.g., EsPaDons, UltraCam, UltraSpec, X-shooter, instruments on extremely large telescopes;
4. Applications: e.g., structure of disc flows, tomographic constraints on black hole and neutron star masses, ultra-compact binaries, cataclysmic variables (magnetic and non-magnetic), X-ray binaries, exoplanets and active galactic nuclei.

The format of the meeting will consist of invited reviews, contributed talks on new results and plenary discussions. The last day is planned as a hands-on training workshop using various tomography methods and applying them to real data. PhD students and young postdocs are particularly invited to attend.

The abstract submission deadline is 30 September and registration deadline 31 October 2013.

More detailed information is available at: http://www.eso.org/tomo2013 or by e-mail to: tomo2013@eso.org