



PHD MEETING - 15 NOV 2016

Sebastiano
Ferraris

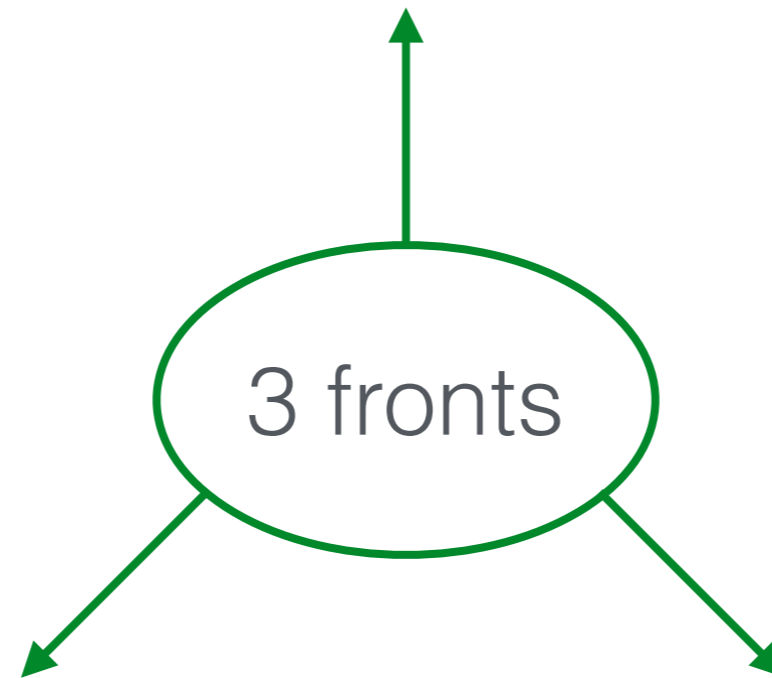
supervisor
Tom Vercauteren

Co-supervisors
Marc Modat, Marco Lorenzi

Clinical supervisor
Jan Deprest



Literature review:
for upgrade and possible future papers



DWI analysis:
Statistical analysis and DTI template
creation

Automatic black holes detection:
T2 analysis and template creation

Resources from the clinical point of view:

Blencowe, H. et al., 2013. Born too soon: the global epidemiology of 15 million preterm births. *Reproductive health*, 10 Suppl 1(Suppl 1), S2.

Blencowe, H. et al., 2012. National, regional, and worldwide estimates of preterm birth rates in the year 2010 with time trends since 1990 for selected countries: A systematic analysis and implications. *The Lancet*, 379(9832), pp.2162–2172.

Chang, H.H. et al., 2013. Preventing preterm births: trends and potential reductions with current interventions in 39 very high human development index countries. *Lancet*, 381(9862), pp.223–234.

Romero, R., 2011. Preterm labour: one syndrome, many causes. *Science*, 18(11), pp.1492–1501.

NICE guidelines, November 2015. Preterm labour and birth:

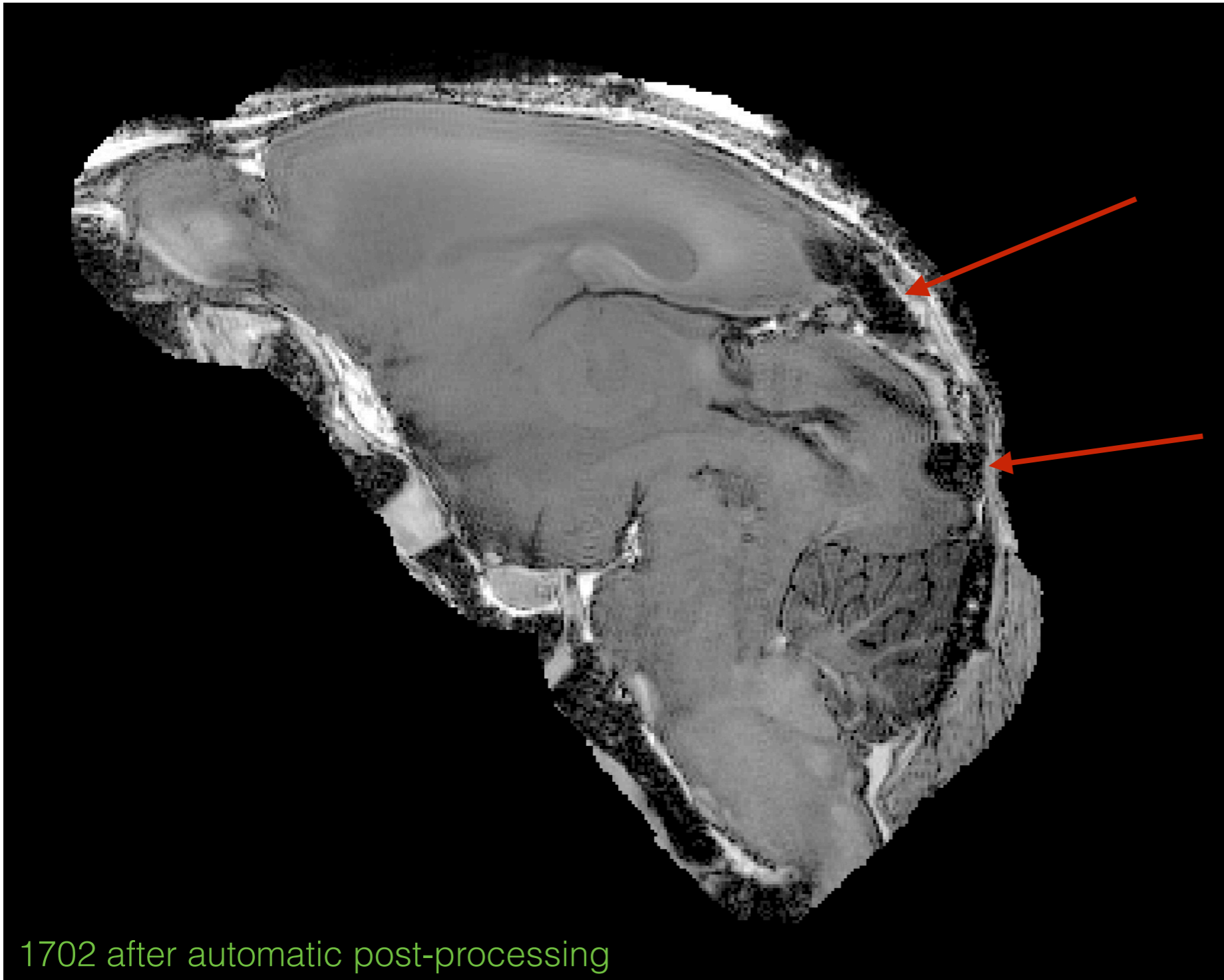
http://www.cochrane.org/CD004454/PREG_antenatal-corticosteroids-for-accelerating-fetal-lung-maturation-for-women-at-risk-of-preterm-birth

http://www.cochrane.org/CD003935/PREG_repeat-doses-prenatal-corticosteroids-women-risk-preterm-birth-preventing-neonatal-respiratory

Green-top clinical guidelines

<https://www.rcog.org.uk/en/guidelines-research-services/guidelines/gtg44/>

<https://www.rcog.org.uk/en/guidelines-research-services/guidelines/gtg7/>



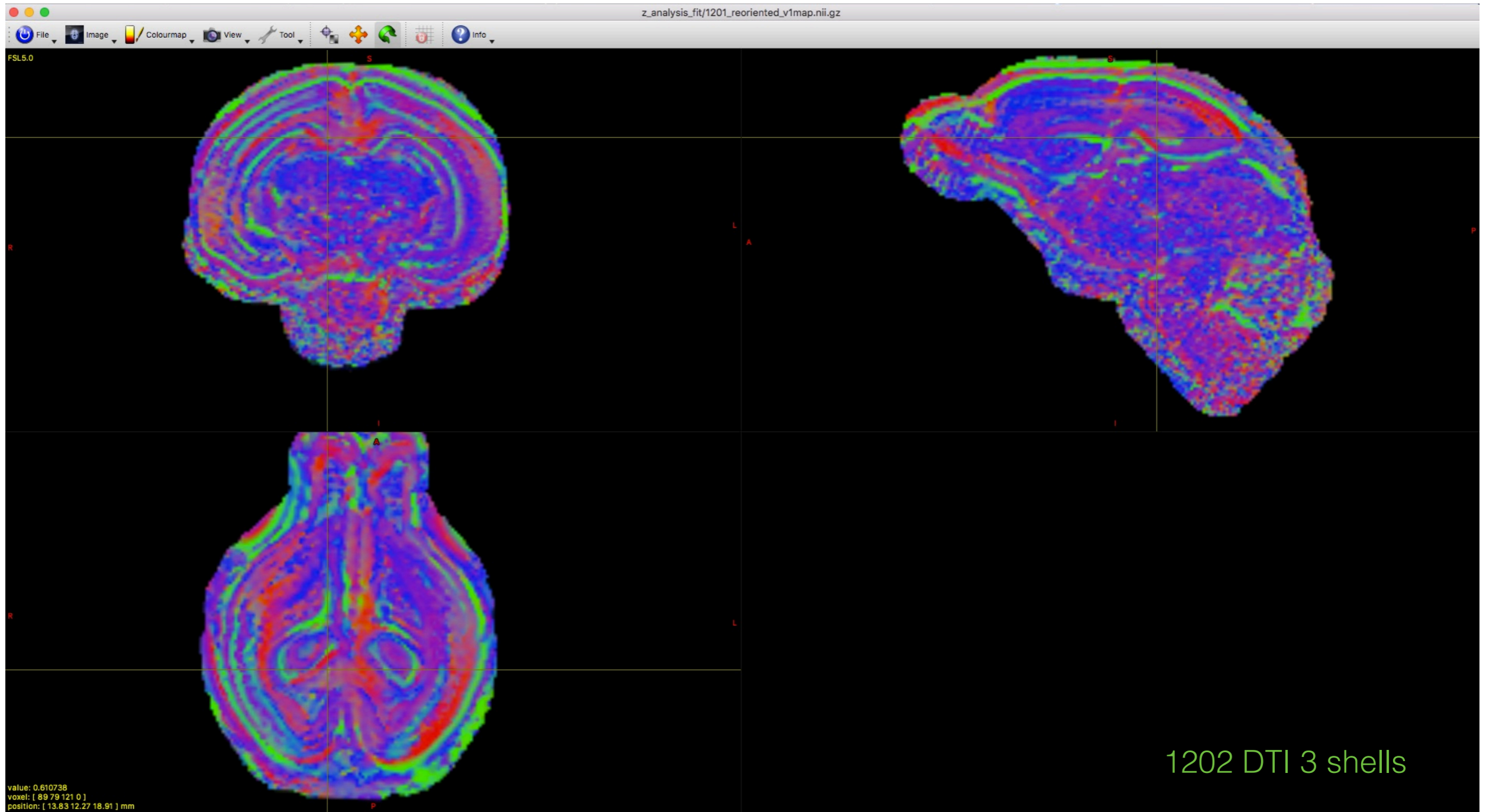
Hermann Weyl's Discrepancy

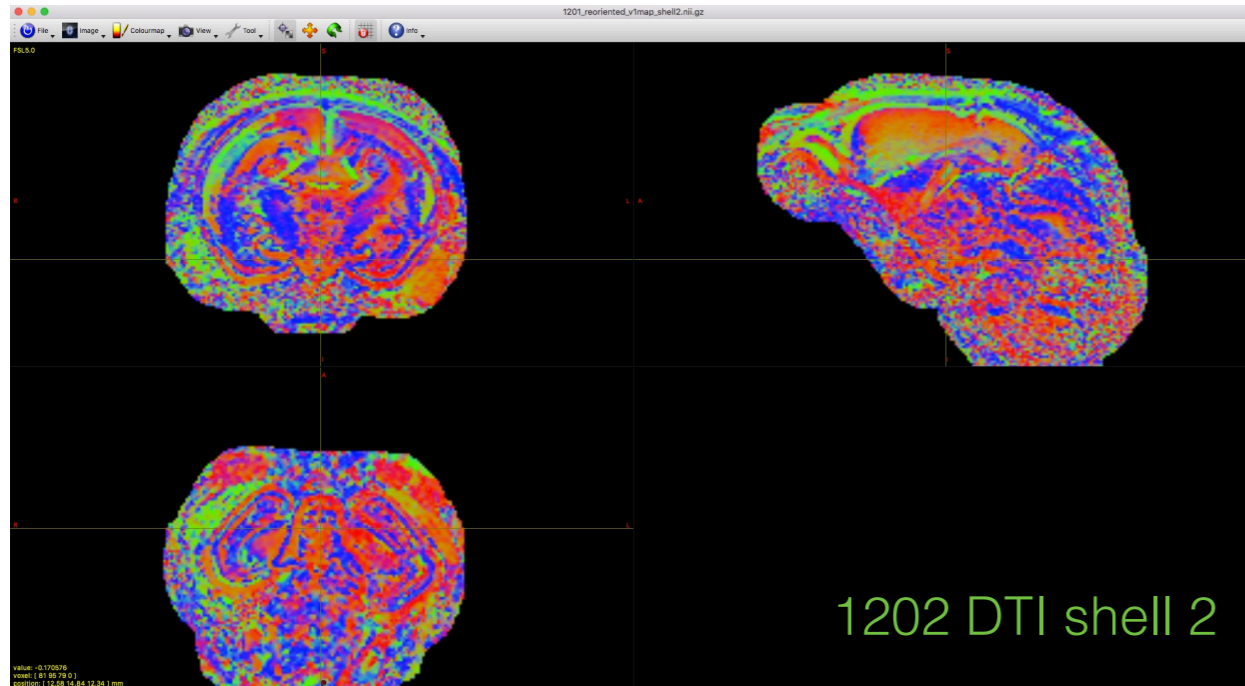
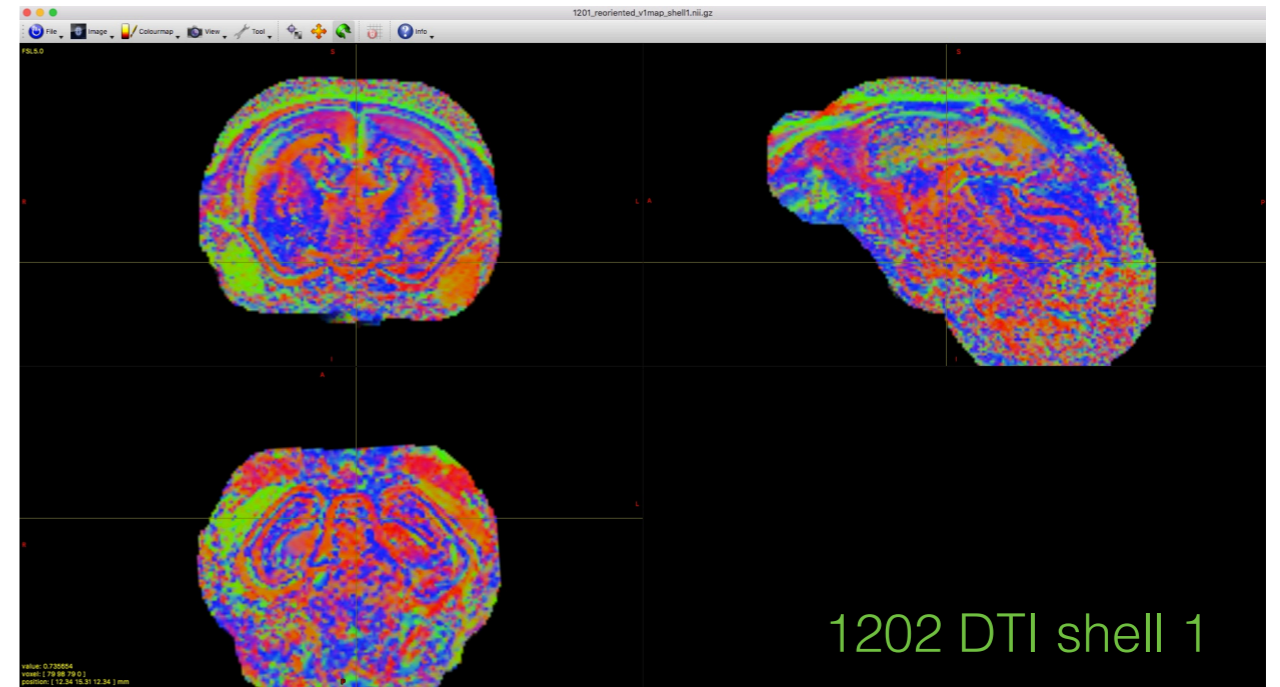
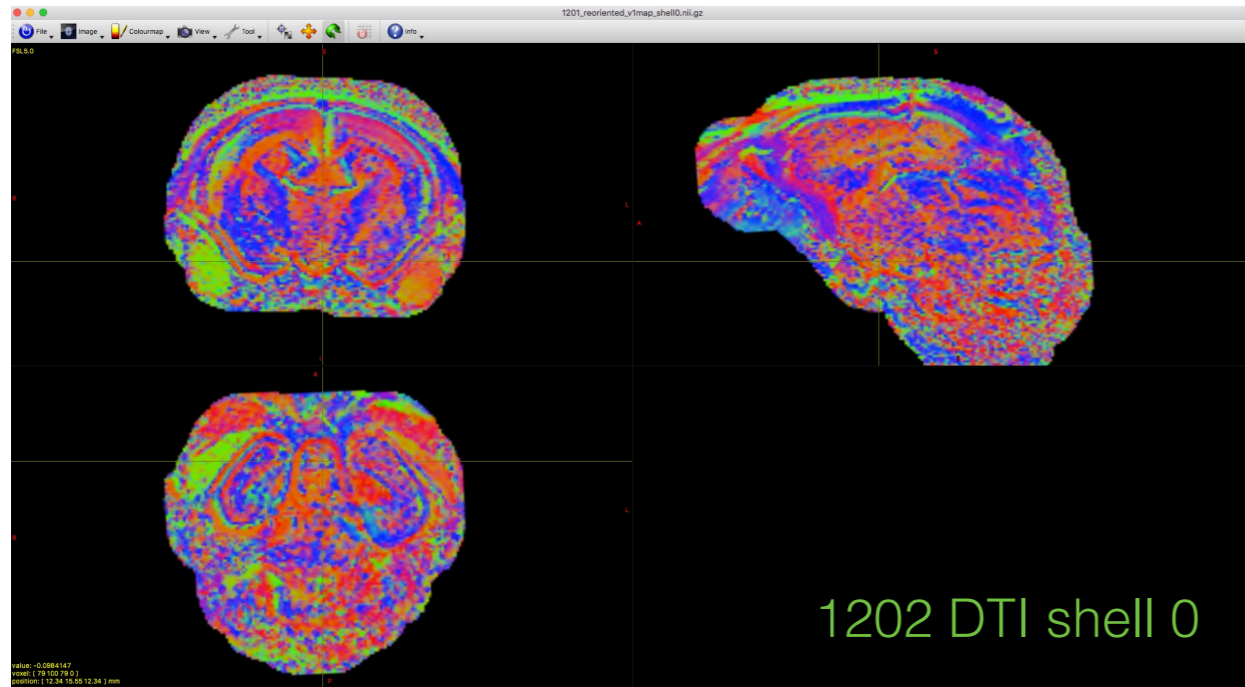
Texture decomposition:

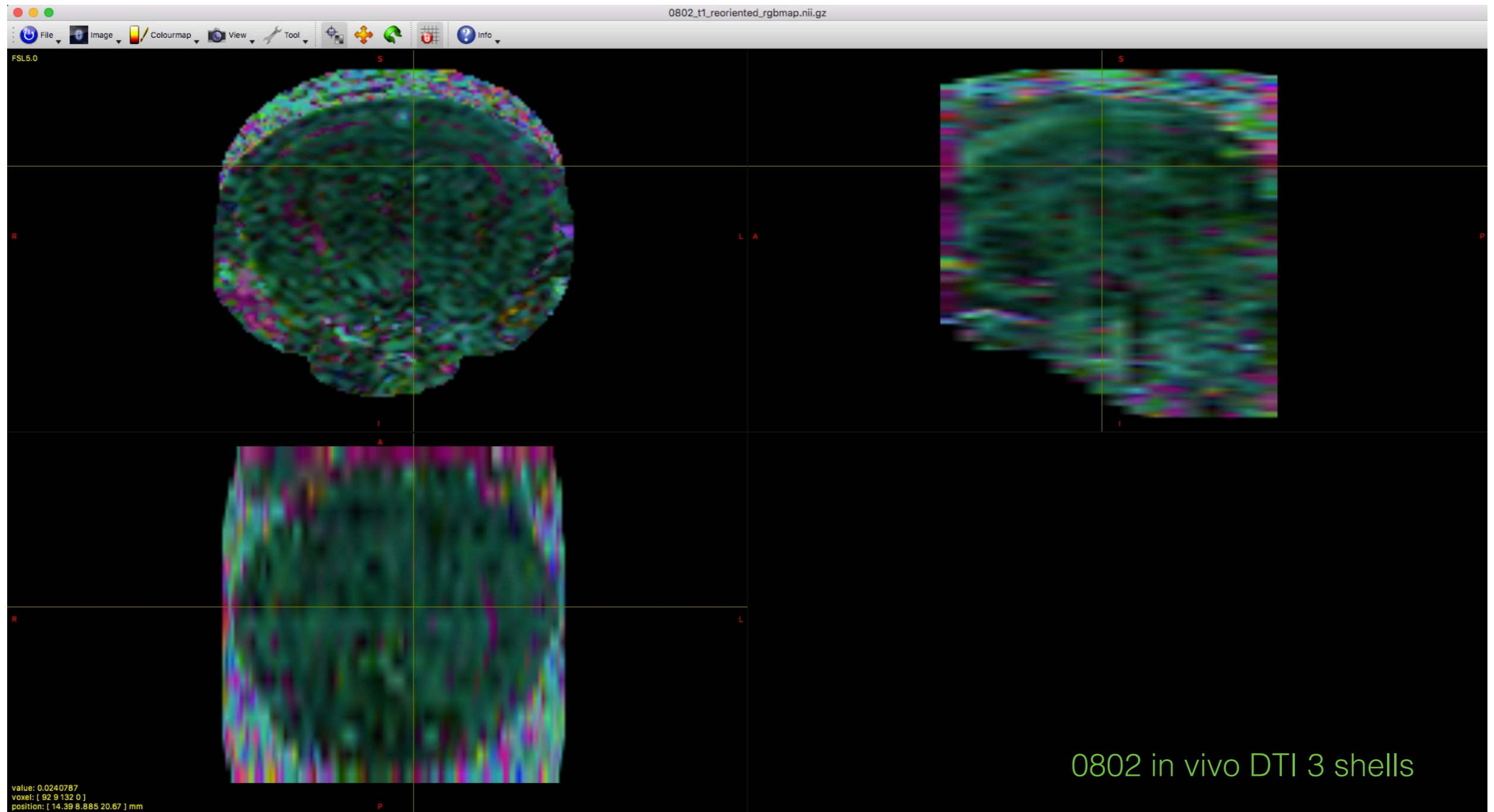
- Meyer
- Rudin-Osher-Fatemi

Detect it as noise with wavelets.

Others?







Will organise shortly a meeting with B. Siow at CABI to understand possible errors.