## Questions, Comments and Answers following the presentation

## The spectrophotometric standard stars grid for the *Gaia* absolute calibration Giuseppe Altavilla

<u>Deustua</u>: What models are you using for the GAIA ground survey stars?

If you mean the spectral templates used to extend our observed spectra to cover the whole Gaia wavelength range (3300-10500A), we used synthetic libraries for internal use provided by coordination Unit 8 (CU8 is the part of the Gaia DPAC concerned with estimating astrophysical parameters for the objects observed by Gaia, see Sordo, R., Vallenari, A., Tantalo, R., et al. 2010 Ap&SS 328 331; Sordo, R., Vallenari, A., Tantalo, R., et al. 2011 JPhCS.328a2006S), and two public libraries: Pollux (Palacios, A.; Gebran, M.; Josselin, E. et al., 2010 A&A 516, 13, <a href="https://pollux.graal.univ-montp2.fr">http://pollux.graal.univ-montp2.fr</a>) and Coelho (Coelho, P., 2009 AIPC.1111 67).

<u>Lupton</u>: How well does G, BP, RP predict broadband fluxes? Can we reach 0.1%? I.e., how well does GAIA know  $QE(\lambda)$  (maybe relative to the calspec standards)?

The Gaia calibration model is quite complex and has several tens of components, for example wavelength calibration, LSF and PSF calibration, reflectivity, QE... The instruments contain 106 CCDs and has a very large focal plane and very different instruments (AF, BP, RP, RVS, SM). There are different calibration models that are being tested with increasing complexity and preliminary tests suggest that we can reach an internal precision of 0.5% at the moment and an external accuracy of ~1%. Both figures could improve with time. See also Carrasco J. M., Evans, D. W., Montegriffo, P.et al. 2016, A&A, 595, 7.