Dr. Mario M. Bisi, MPhys (Hons) (WALES), Ph.D. (WALES), FRAS, MInstP

Dr. Bisi's main research interests concern the origin and development of the large-scale structure of the solar wind and solar-wind transients (Heliophysics) and their influence on the inner planets. Particular focus is on the space weather they can create at Earth. He is experienced in working with both ground-based radio observations and various forms of spacecraft data (remote sensing and *in situ*) as well as in three-dimensional tomographic reconstruction of the inner heliosphere. Dr. Bisi has authored/co-authored over 65 publications/reports (over 55 refereed) and well over 200 conference presentations (including over 32 invited talks where 13 were as first author). He has acted as a scientific reviewer of proposals (and sat on proposal panels), for scientific journals including (among others) Advances in Geosciences (the original AOGS journal series), The Astrophysical Journal, Journal of Geophysical Research, Solar Physics, and Radio Science, and has organized various workshops and sessions at multiple national and international conferences (five workshops and over 14 sessions at AGU, AOGS, NAM, *etc*.). He has also been a Solar Physics journal Guest Editor for four separate Topical Issues, NASA Living With a Star (LWS) TR&T Steering Committee Liaison, as well as holding multiple community positions such as the Sun and Heliosphere (ST-H) Secretary for the AOGS (2011-2013, re-elected 2013-2015) a member of the UK's Magnetosphere Ionosphere Solar-Terrestrial (MIST) Council, the heliospheric coordinator for the Murchison Widefield Array (MWA) Solar Heliosphere Ionosphere (SHI) scientific community (2012-present; member since 2006), and he is also an active core member of the LOw Frequency ARray (LOFAR) Solar physics and Space Weather Key Science Project (SSW-KSP) (2012-present; member in 2011). In addition, he was the LOFAR-UK Management Committee Representative for Aberystwyth University (2012-2013) before joining RAL Space at the Science & Technology Facility Council's Rutherford Appleton Laboratory (STFC, RAL).

Education:

July 2006 – Ph.D. (Solar/Heliospheric Physics) – University of Wales, Aberystwyth (GB)
July 2002 – MPhys (Hons) (Physics with Astronomy) – University of Wales, Cardiff (GB)

Research Experience:

August 2013-Present	Space Weather Scientist, RAL Space, STFC, RAL, Didcot, UK
January 2010-July 2013	Post-Doctoral Research Associate (and Senior Lecturer cover for research and research administration), IMAPS, Aberystwyth University, UK
June-August 2011	Visiting Postdoctoral Scholar (Secondment), CASS, UCSD, USA
August 2006-December 2009	International Postdoctoral Scholar, CASS, UCSD, USA
September 2002-July 2006	Post-Graduate Student Researcher, IMAPS, UWA, UK

Selected Publications:

Bisi, M.M., *et al*. (83 co-authors), "The First Coronal Mass Ejection Observed with the LOw Frequency ARray (LOFAR)", approved March 2014 by the LOFAR internal review committee, submitted to the Astrophysical Journal Supplementary Series, 2014.

Howard, T.A., **M.M. Bisi** *et al*. (18 additional co-authors), "The Solar Mass Ejection Imager and the Heliospheric Imaging Legacy", Space Science Reviews, 180 (1-4), pp.1-38, doi:10.1007/s11214-013-9992-7, 2013.

Fallows, R.A., A. Askegar, **M.M. Bisi**, A.R. Breen, S. ter-Veen, and the LOFAR Development Team, "The Dynamic Spectrum of Interplanetary Scintillation: First Solar Wind Observations on LOFAR", Solar Physics, 285 (1-2), pp.127-139, doi:10.1007/s11207-012-9989-5, 2013.

Bisi, M.M., *et al*. (27 co-authors), "From the Sun to the Earth: The 13 May 2005 Coronal Mass Ejection", Solar Physics, 265 (1-2), pp.49-127, doi:10.1007/s11207-010-9602-8, 2010.

Bisi, M.M., B.V. Jackson, P.P. Hick, A. Buffington, J.M. Clover, M. Tokumaru, and K. Fujiki, "Three-Dimensional Reconstructions and Mass Determination of the 2008 June 2 LASCO Coronal Mass Ejection using STELab Interplanetary Scintillation Observations", The Astrophysical Journal Letters, 715, pp.L104-L108, doi:10.1088/2041-8205/715/2/L104, 2010.

Bisi, M.M., B.V. Jackson, P.P. Hick, A. Buffington, D. Odstrcil, and J.M. Clover, "3D Reconstructions of the Early-November 2004 CDAW Geomagnetic Storms: Analyses of STELab IPS speed and SMEI density data", (CDAW) Journal of Geophysical Research – Space Physics Special Edition - Geomagnetic Storms of Solar Cycle 23, 113, A00A11, pp.1-10, doi:10.1029/2008JA013222, 2008 (*AGU Space Weather Editor's Choice*).