

Alessandro Bemporad  
PUBLICATIONS  
(March 2024)

During his career he published a total of 115 referee papers, 28 conference proceedings, 36 technical papers, 14 technical reports, and 11 outreach papers, all listed below.

• **REFEREED PUBLICATIONS (H index = [25 – from NASA ADS](#))**

1. “Space weather-related activities and projects on-going at INAF-Turin Observatory”, **Bemporad, A.**, Fineschi, S., Abbo, L., and 18 co-authors, Rendiconti Lincei. Scienze Fisiche e Naturali. Scienze Fisiche e Naturali, Volume 34, Issue 4, 2023  
<https://ui.adsabs.harvard.edu/abs/2023RLSFN...34.1055B/abstract>
2. “Analysis of the first coronagraphic multi-band observations of a sungrazing comet”, **Bemporad, A.**, Pennella, S., Battams, K., and 35 co-authors, Astronomy & Astrophysics, Volume 680, id.A90, 2023.  
<https://ui.adsabs.harvard.edu/abs/2023A%26A...680A..90B/abstract>
3. “First Metis Detection of the Helium D3 Line Polarization in a Large Eruptive Prominence”, Heinzel, P., Jejić, S., Štěpán, J., and 24 co-authors, The Astrophysical Journal Letters, Volume 957, Issue 1, id.L10, 2023.  
<https://ui.adsabs.harvard.edu/abs/2023ApJ...957L..10H/abstract>
4. “Two-dimensional MHD modelling of switchbacks from jetlets in the slow solar wind”, Biondo, R., Bemporad, A., Pagano, P., Reale, F., Astronomy & Astrophysics, Volume 679, id.L14, 2023  
<https://ui.adsabs.harvard.edu/abs/2023A%26A...679L..14B/abstract>
5. “Physics-driven Machine Learning for the Prediction of Coronal Mass Ejections' Travel Times”, Guastavino, S., Candiani, V., **Bemporad, A.**, The Astrophysical Journal, Volume 954, Issue 2, id.151, 2023.  
<https://ui.adsabs.harvard.edu/abs/2023ApJ...954..151G/abstract>
6. “Reconstrucción tridimensional de la velocidad del viento solar mediante tomografía Lyman- $\alpha$ ”, Nuevo, F. A., Vásquez, A. M., Frassati, F., Bemporad, A., and 4 co-authors, Boletín de la Asociación Argentina de Astronomía. Edited by R.D. Rohrmann, C.H. Mandrini, C.E. Boeris and M.A. Sgró. Vol. 64, 2023.  
<https://ui.adsabs.harvard.edu/abs/2023BAAA...64....8N/abstract>
7. “A high-latitude coronal mass ejection observed by a constellation of coronagraphs: Solar Orbiter/Metis, STEREO-A/COR2, and SOHO/LASCO”, Zimbardo, G., Ying, B., Nisticò, G., and 35 co-authors, Astronomy & Astrophysics, Volume 676, id.A48, 2023  
<https://ui.adsabs.harvard.edu/abs/2023A%26A...676A..48Z/abstract>
8. “In-flight radiometric calibration of the Metis Visible Light channel using stars and comparison with STEREO-A/COR2 data”, De Leo, Y., Burtovoi, A., Teriaca, L., and 45 co-authors, Astronomy & Astrophysics, Volume 676, id.A45, 2023.  
<https://ui.adsabs.harvard.edu/#abs/2023A%26A...676A..45D/abstract>
9. “A New Method Linking the Solar Wind Speed to the Coronal Magnetic Field”, Casti, M., Arge, C. N., **Bemporad, A.**, Pinto, R. F.; Henney, C. J., The Astrophysical Journal, Volume 949, Issue 2, id.42, 2023.  
<https://ui.adsabs.harvard.edu/abs/2023ApJ...949...42C/abstract>
10. “Three Eruptions Observed by Remote Sensing Instruments Onboard Solar Orbiter”, Mierla, M., Cremades, H., Andretta, V., and 31 co-authors, Solar Physics, Volume 298, Issue 3, article id.42, 2023.  
<https://ui.adsabs.harvard.edu/abs/2023SoPh..298...42M/abstract>
11. “Coronal Magnetic Fields Derived with Images Acquired during the 2017 August 21 Total Solar Eclipse”, **Bemporad A.**, The Astrophysical Journal, Volume 946, Issue 1, id.14, 2023.  
<https://ui.adsabs.harvard.edu/abs/2023ApJ...946...14B/abstract>
12. “Is There a Dynamic Difference between Stealthy and Standard Coronal Mass Ejections?”, Beili, Y., **Bemporad, A.**, and 3 coauthors, The Astrophysical Journal, Volume 942, Issue 1, id.3., 2023.  
<https://ui.adsabs.harvard.edu/abs/2023ApJ...942....3Y/abstract>
13. “Three-dimensional reconstruction of type U radio bursts: a novel remote sensing approach for coronal loops”, Mancuso, S., Barghini, D., **Bemporad, A.**, and 5 coauthors, Astronomy & Astrophysics, Volume 669, id.A28, 2023.  
<https://ui.adsabs.harvard.edu/abs/2023A%26A...669A..28M/abstract>

14. “Connecting Solar Orbiter remote-sensing observations and Parker Solar Probe in situ measurements with a numerical MHD reconstruction of the Parker spiral”, Biondo, R., **Bemporad, A.**, and 22 coauthors, *Astronomy & Astrophysics*, Volume 668, id.A144, 2022.  
<https://ui.adsabs.harvard.edu/abs/2022A%26A...668A.144B/abstract>
15. “Tomography of the Solar Corona with the Metis Coronagraph I: Predictive Simulations with Visible-Light Images”, Vasquez, A.M., and 7 coauthors, *Solar Physics*, Volume 297, Issue 9, article id.120, 2022.  
<https://ui.adsabs.harvard.edu/abs/2022SoPh...297..120V/abstract>
16. “Coronal mass ejection followed by a prominence eruption and a plasma blob as observed by Solar Orbiter”, **Bemporad, A.**, and 28 coauthors, *Astronomy & Astrophysics*, Volume 665, id.A7, 2022.  
<https://ui.adsabs.harvard.edu/abs/2022A%26A...665A...7B/abstract>
17. “Polarimetric Studies of a Fast Coronal Mass Ejection”, Mierla, M., and 6 coauthors, *Solar Physics*, Volume 297, Issue 7, article id.78, 2022.  
<https://ui.adsabs.harvard.edu/abs/2022SoPh...297...78M/abstract>
18. “Acceleration of Solar Energetic Particles through CME-driven Shock and Streamer Interaction”, Frassati, F., and 7 coauthors, *The Astrophysical Journal*, Volume 926, Issue 2, id.227, 2022.  
<https://ui.adsabs.harvard.edu/abs/2022ApJ...926..227F/abstract>
19. “Temperature and Thermal Energy of a Coronal Mass Ejection”, **Bemporad, A.**, *Symmetry*, vol. 14, issue 3, p. 468, 2022.  
<https://ui.adsabs.harvard.edu/abs/2022Symm...14..468B/abstract>
20. “Ultraviolet Observations of Comet 96/P Machholz at Perihelion”, Raymond, J.C., and 4 coauthors, *The Astrophysical Journal*, Volume 926, Issue 1, id.93, 2022.  
<https://ui.adsabs.harvard.edu/abs/2022ApJ...926...93R/abstract>
21. “The first coronal mass ejection observed in both visible-light and UV H I Ly- $\alpha$  channels of the Metis coronagraph on board Solar Orbiter”, Andretta, V., **Bemporad, A.**, and 69 coauthors, *Astronomy & Astrophysics*, Volume 656, id.L14, 2021.  
<https://ui.adsabs.harvard.edu/abs/2021A%26A...656L..14A/abstract>
22. “First light observations of the solar wind in the outer corona with the Metis coronagraph”, Romoli, M., and 67 coauthors, *Astronomy & Astrophysics*, Volume 656, id.A32, 2021.  
<https://ui.adsabs.harvard.edu/abs/2021A%26A...656A..32R/abstract>
23. “Cosmic-ray flux predictions and observations for and with Metis on board Solar Orbiter”, Grimani, C., and 43 coauthors, *Astronomy & Astrophysics*, Volume 656, id.A15, 2021.  
<https://ui.adsabs.harvard.edu/abs/2021A%26A...656A..15G/abstract>
24. “Exploring the Solar Wind from Its Source on the Corona into the Inner Heliosphere during the First Solar Orbiter-Parker Solar Probe Quadrature”, Telloni, D., and 70 coauthors, *The Astrophysical Journal Letters*, Volume 920, Issue 1, id.L14, 2021.  
<https://ui.adsabs.harvard.edu/abs/2021ApJ...920L..14T/abstract>
25. “Tracing the ICME plasma with a MHD simulation”, Biondo, R., and 3 coauthors, *Astronomy & Astrophysics*, Volume 654, id.L3, 2021.  
<https://ui.adsabs.harvard.edu/abs/2021A%26A...654L...3B/abstract>
26. “Combining white light and UV Lyman- $\alpha$  coronagraphic images to determine the solar wind speed. The quick inversion method”, **Bemporad, A.**, and 3 coauthors, *Astronomy & Astrophysics*, Volume 654, id.A58, 2021.  
<https://ui.adsabs.harvard.edu/abs/2021A%26A...654A..58B/abstract>
27. “Magnetic imaging of the outer solar atmosphere (MImOSA)”, Peter, H., and 23 coauthors, *Experimental Astronomy*, Online First, 2021.  
<https://ui.adsabs.harvard.edu/abs/2021ExA...tmp...95P/abstract>
28. “Effects of the chromospheric Ly $\alpha$  line profile shape on the determination of the solar wind H I outflow velocity using the Doppler dimming technique”, Capuano, G.E., and 17 coauthors, *Astronomy & Astrophysics*, Volume 652, id.A85, 2021.  
<https://ui.adsabs.harvard.edu/abs/2021A%26A...652A..85C/abstract>
29. “Radio evidence for a shock wave reflected by a coronal hole”, Mancuso, S., **Bemporad, A.**, and 5 coauthors, *Astronomy & Astrophysics*, Volume 651, id.L14, 2021.  
<https://ui.adsabs.harvard.edu/abs/2021A%26A...651L..14M/abstract>
30. “Metrology on-board PROBA-3: The shadow position sensors subsystem”, Noce, V., and 13 coauthors, *Advances in Space Research*, Volume 67, Issue 11, p. 3807-3818, 2021  
<https://ui.adsabs.harvard.edu/abs/2021AdSpR..67.3807N/abstract>

31. “PROBA-3 mission and the Shadow Position Sensors: Metrology measurement concept and budget”, Loreggia, D., and 26 coauthors, *Advances in Space Research*, Volume 67, Issue 11, p. 3793-3806, 2021  
<https://ui.adsabs.harvard.edu/abs/2021AdSpR..67.3793L/abstract>
32. “The Solar Wind”, Rouillard, A.P., and 12 coauthors, *Space Physics and Aeronomy*, Volume 1, Solar Physics and Solar Wind, 2021  
<https://ui.adsabs.harvard.edu/abs/2021GMS...258....1R/abstract>
33. “Possible advantages of a twin spacecraft Heliospheric mission at the Sun-Earth Lagrangian points L4 and L5”, **Bemporad A.**, *Frontiers in Astronomy and Space Sciences*, Volume 8, id.11, 2021  
<https://ui.adsabs.harvard.edu/abs/2021FrASS...8...11B/abstract>
34. “Reconstruction of the Parker spiral with the Reverse In situ data and MHD Approach - RIMAP”, Biondo, R., **Bemporad, A.**, and 2 coauthors, *Journal of Space Weather and Space Climate*, Volume 11, id.7, 2021.  
<https://ui.adsabs.harvard.edu/abs/2021JSWSC..11....7B/abstract>
35. “Coronal Electron Densities Derived with Images Acquired during the 2017 August 21 Total Solar Eclipse”, **Bemporad A.**, *ApJ*, 904, Issue 2, id.178, 2020.  
<https://ui.adsabs.harvard.edu/abs/2020ApJ...904..178B/abstract>
36. “Metis: the Solar Orbiter visible light and ultraviolet coronal imager”, Antonucci, E., Romoli, E., Andretta, V., and 100 coauthors, 642, *A10*, 2020.  
[https://www.aanda.org/articles/aa/full\\_html/2020/10/aa35338-19/aa35338-19.html](https://www.aanda.org/articles/aa/full_html/2020/10/aa35338-19/aa35338-19.html)
37. “Coordination within the remote sensing payload on the Solar Orbiter mission”, F. Auchère, F., Andretta, V., Antonucci, E., Bach, N., Battaglia, M., **Bemporad, A.**, and 68 coauthors, *A&A*, 642, A6, 2020.  
[https://www.aanda.org/articles/aa/full\\_html/2020/10/aa37032-19/aa37032-19.html](https://www.aanda.org/articles/aa/full_html/2020/10/aa37032-19/aa37032-19.html)
38. “The Solar Orbiter Science Activity Plan”, Zouganelis, I., De Groof, A., Walsh, A.P., and 182 co authors, *A&A*, 642, A3, 2020.  
[https://www.aanda.org/articles/aa/full\\_html/2020/10/aa38445-20/aa38445-20.html](https://www.aanda.org/articles/aa/full_html/2020/10/aa38445-20/aa38445-20.html)
39. “Models and data analysis tools for the Solar Orbiter mission”, Rouillard, A.P., Pinto, R., Vourlidas, A., De Groof, A., Thomson, W.T., **Bemporad, A.**, and 101 coauthors, *A&A*, 642, A2, 2020.  
[https://www.aanda.org/articles/aa/full\\_html/2020/10/aa35305-19/aa35305-19.html](https://www.aanda.org/articles/aa/full_html/2020/10/aa35305-19/aa35305-19.html)
40. “Estimate of Plasma Temperatures Across a CME-Driven Shock from a Comparison Between EUV and Radio Data”, Frassati, F., Mancuso, S., & **Bemporad, A.**, *Sol. Phys.*, 295, 124, 2019.  
<https://link.springer.com/article/10.1007/s11207-020-01686-0?>
41. “Hydrogen non-equilibrium ionisation effects in coronal mass ejections”, Pagano, P., **Bemporad, A.**, Mackay, D. H., *A&A*, 637, id.A49, 2020.  
<https://ui.adsabs.harvard.edu/abs/2020A%26A...637A..49P/abstract>
42. “Extensive Study of a Coronal Mass Ejection with UV and White-light Coronagraphs: The Need for Multiwavelength Observations”, Ying, B., **Bemporad, A.**, Feng, L., and 3 coauthors, 899, Issue 1, id.12, 2020.  
<https://ui.adsabs.harvard.edu/abs/2020ApJ...899...12Y/abstract>
43. “On the Possibility of Detecting Helium D<sub>3</sub> Line Polarization with Metis”, Heinzl, P., Štěpán, J., **Bemporad, A.**, and 4 coauthors, *ApJ*, 900, Issue 1, id.8, 2020.  
<https://ui.adsabs.harvard.edu/abs/2020ApJ...900....8H/abstract>
44. “Current state and perspectives of Space Weather science in Italy”, Plainaki, C., Antonucci, M., **Bemporad, A.**, and 17 coauthors, *JSWSC*, 10, id.6, 2020.  
<https://ui.adsabs.harvard.edu/abs/2020JSWSC..10....6P/abstract>
45. “Comprehensive Analysis of the Formation of a Shock Wave Associated with a Coronal Mass Ejection”, Frassati, F., Susino, R., Mancuso, S., **Bemporad, A.**, *ApJ*, 871, Issue 2, article id. 212, 2019.  
<https://ui.adsabs.harvard.edu/abs/2019ApJ...871..212F/abstract>
46. “Three-dimensional reconstruction of CME-driven shock-streamer interaction from radio and EUV observations: a different take on the diagnostics of coronal magnetic fields”, Mancuso, S., Frassati, F., **Bemporad, A.**, Barghini, D., *A&A*, 624, id.L2, 2019.  
<https://ui.adsabs.harvard.edu/abs/2019A%26A...624L...2M/abstract>
47. “Comparing extrapolations of the coronal magnetic field structure at 2.5 R<sub>⊙</sub> with multi-viewpoint coronagraphic observations”, Sasso, C., Pinto, R. F., Andretta, V., Howard, R. A., Vourlidas, A., **Bemporad, A.**, and 16 coauthors, *A&A*, 627, id.A9, 2019.  
<https://ui.adsabs.harvard.edu/abs/2019A%26A...627A...9S/abstract>
48. “Effect of the non-uniform solar chromospheric Ly $\alpha$  radiation on determining the coronal H I outflow velocity”, Dolei, S., Spadaro, D., Ventura, R., **Bemporad, A.**; and 12 coauthors, *A&A*, 627, id.A18, 2019.  
<https://ui.adsabs.harvard.edu/abs/2019A%26A...627A...18D/abstract>

49. “First Determination of 2D Speed Distribution within the Bodies of Coronal Mass Ejections with Cross-correlation Analysis”, Ying, B., **Bemporad, A.**, Giordano, S., and 5 coauthors, ApJ, 880, Issue 1, article id. 41, 2019.  
<https://ui.adsabs.harvard.edu/abs/2019ApJ...880...41Y/abstract>
50. “Evidence for Rayleigh-Taylor Plasma Instability at the Front of Solar Coronal Mass Ejections”, Telloni, D., Carbone, F., **Bemporad, A.**, & Antonucci, E., Atmosphere, vol. 10, issue 8, 2019.  
<https://ui.adsabs.harvard.edu/abs/2019Atmos...10..468T/abstract>
51. “Detection of Coronal Mass Ejections at L1 and Forecast of Their Geoeffectiveness”, Telloni, D., Antonucci, E., **Bemporad, A.**, and 6 coauthors, ApJ, 885, Issue 2, article id. 120, 2019.  
<https://ui.adsabs.harvard.edu/abs/2019ApJ...885..120T/abstract>
52. “Visibility of Prominences Using the HeI D<sub>3</sub> Line Filter on the PROBA-3/ASPIICS Coronagraph”, Jejčić, S. Heinzel, P., Labrosse, N., Zhukov, A. N., **Bemporad, A.**, and 2 coauthors, Sol. Phys., 293, Issue 2, article id. 33, 2018.  
<https://ui.adsabs.harvard.edu/abs/2018SoPh..293...33J/abstract>
53. “Mapping the solar wind HI outflow velocity in the inner heliosphere by coronagraphic ultraviolet and visible-light observations”, Dolei, S., Susino, R., Sasso, C., **Bemporad, A.**, and 17 coauthors, A&A, 612, id.A84, 2018.  
<https://ui.adsabs.harvard.edu/abs/2018A%26A...612A..84D/abstract>
54. “Hot prominence detected in the core of a coronal mass ejection. III. Plasma filling factor from UVCS Lyman- $\alpha$  and Lyman- $\beta$  observations”, Susino, R., **Bemporad, A.**, Jejčić, S., Heinzel, P., A&A, 617, id.A21, 2018.  
<https://ui.adsabs.harvard.edu/abs/2018A%26A...617A..21S/abstract>
55. “Evolution of the Solar Wind Speed with Heliocentric Distance and Solar Cycle. Surprises from Ulysses and Unexpectedness from Observations of the Solar Corona”, Khabarova, O. V., Obridko, V. N., Kislov, R. A., Malova, H. V., **Bemporad, A.**, and 3 coauthors, Plasma Physics Reports, Vol. 44, Issue 9, 2018.  
<https://ui.adsabs.harvard.edu/abs/2018PIPhR..44..840K/abstract>
56. “Measuring the electron temperatures of coronal mass ejections with future space-based multi-channel coronagraphs: a numerical test”, **Bemporad, A.**, Pagano, P., Giordano, S., A&A, 619, id.A25, 2018.  
<https://ui.adsabs.harvard.edu/#abs/2018A%26A...619A..25B/abstract>
57. “Comprehensive Analysis of the Geoeffective Solar Event of 21 June 2015: Effects on the Magnetosphere, Plasmasphere, and Ionosphere Systems”, Piersanti M., Alberti T., **Bemporad A.**, et al., Sol. Phys., 292, 169, 2017.  
<https://ui.adsabs.harvard.edu/#abs/2017SoPh..292..169P/abstract>
58. “Hot prominence detected in the core of a coronal mass ejection. II. Analysis of the C III line detected by SOHO/UVCS”, Jejčić, S., Susino, R., Heinzel, P., Džifčáková, E., **Bemporad, A.**, Anzer, U., ApJ, 607, 80, 2017.  
<https://ui.adsabs.harvard.edu/#abs/2017A%26A...607A..80J/abstract>
59. “Constraining the pass-band of future space-based coronagraphs for observations of solar eruptions in the FeXIV 530.3 nm “green line””, **Bemporad A.**, Pagano P., Giordano S., Fineschi S., Exp. Astron., 44, 83, 2017.  
<https://ui.adsabs.harvard.edu/#abs/2017ExA....44...83B/abstract>
60. “Study of the early phase of a Coronal Mass Ejection driven shock in EUV images”, Frassati F., Susino R., Mancuso S., **Bemporad, A.**, Astroph. & Sp. Sci., 362, 194, 2017.  
<https://ui.adsabs.harvard.edu/#abs/2017Ap%26SS.362..194F/abstract>
61. “Exploring the Inner Acceleration Region of Solar Wind: A Study Based on Coronagraphic UV and Visible Light Data”, **Bemporad A.**, ApJ, 846, 86, 2017 .  
<https://ui.adsabs.harvard.edu/#abs/2017ApJ...846...86B/abstract>
62. “Determination of Coronal Mass Ejection Physical Parameters from a Combination of Polarized Visible Light and UV Ly $\alpha$  Observations”, Susino R., & **Bemporad A.**, ApJ, 830 (2), 58, 2016.  
<https://ui.adsabs.harvard.edu/#abs/2016ApJ...830...58S/abstract>
63. “Measuring coronal magnetic fields with remote sensing observations of shock waves”, **Bemporad A.**, Susino R., Frassati F., Fineschi S., Frontiers in Astronomy and Space Sciences, Vol- 3, id.17, 2016.  
<https://ui.adsabs.harvard.edu/#abs/2016FrASS...3...17B/abstract>
64. “Hot prominence detected in the core of a coronal mass ejection: Analysis of SOHO/UVCS L $\alpha$  and SOHO/LASCO visible-light observations”, Heinzel P., Susino R., Jejčić S., **Bemporad A.**, Anzer U., A&A, 589, id.A128, 2016.  
<https://ui.adsabs.harvard.edu/#abs/2016A%26A...589A.128H/abstract>

65. “Study of sungrazing comets with space-based coronagraphs: New possibilities offered by METIS on board Solar Orbiter”, **Bemporad A.**, et al., *Adv. Sp. Res.*, 56 (10), 2288, 2015.  
<https://ui.adsabs.harvard.edu/#abs/2015AdSpR..56.2288B/abstract>
66. “Physical Conditions of Coronal Plasma at the Transit of a Shock Driven by a Coronal Mass Ejection”, Susino R., **Bemporad A.**, Mancuso S., *ApJ*, 812, 119, 2015.  
<https://ui.adsabs.harvard.edu/#abs/2015ApJ...812..119S/abstract>
67. “Future capabilities of CME polarimetric 3D reconstructions with the METIS instrument: A numerical test”, Pagano P., **Bemporad A.**, Mackay D. H., *A&A*, 582, A72, 2015.  
<https://ui.adsabs.harvard.edu/#abs/2015A%26A...582A..72P/abstract>
68. “Plasma Physical Parameters along CME-driven Shocks. II. Observation-Simulation Comparison”, Bacchini F., Susino R., **Bemporad A.**, Lapenta, G., *ApJ*, 809, 58, 2015.  
<https://ui.adsabs.harvard.edu/#abs/2015ApJ...809...58B/abstract>
69. “Physical properties of solar polar jets. A statistical study with Hinode XRT data”, Parashiv A.R., **Bemporad A.**, Sterling, A.C., *A&A*, 579, A96, 2015.  
<https://ui.adsabs.harvard.edu/#abs/2015A%26A...579A..96P/abstract>
70. “Uncertainties in polarimetric 3D reconstructions of coronal mass ejections”, **Bemporad A.** & Pagano P., *A&A*, 576, A93, 2015.  
<https://ui.adsabs.harvard.edu/#abs/2015A%26A...576A..93B/abstract>
71. “Three-dimensional Stereoscopic Analysis of a Coronal Mass Ejection and Comparison with UV Spectroscopic Data”, Susino R., **Bemporad A.**, Dolei S., *ApJ*, 790, 25, 2014.  
<https://ui.adsabs.harvard.edu/#abs/2014ApJ...790...25S/abstract>
72. “Plasma Physical Parameters along Coronal-mass-ejection-driven Shocks. I. Ultraviolet and White-light Observations”, **Bemporad, A.**; Susino, R.; Lapenta, G., *ApJ*, 784, 102, 2014.  
<https://ui.adsabs.harvard.edu/#abs/2014ApJ...784..102B/abstract>
73. “Measurements with STEREO/COR1 data of drag forces acting on small-scale blobs falling in the intermediate corona”, Dolei S., **Bemporad A.**, Spadaro D., *A&A*, 562, 74, 2014.  
<https://ui.adsabs.harvard.edu/#abs/2014A%26A...562A..74D/abstract>
74. “Characteristics of polar coronal hole jets”, Chandrashekhar K., **Bemporad A.**, Banerjee D., Gupta G. R., Teriaca L., *A&A*, 561, id.A104, 2014.  
<https://ui.adsabs.harvard.edu/#abs/2014A%26A...561A.104C/abstract>
75. “Plasma Heating in a Post Eruption Current Sheet: A Case Study Based on Ultraviolet, Soft, and Hard X-Ray Data”, Susino R., **Bemporad A.**, & Krucker S., *ApJ*, 777 (2), article id. 93, 2013.  
<https://ui.adsabs.harvard.edu/#abs/2013ApJ...777...93S/abstract>
76. “Study of a Coronal Mass Ejection with SOHO/UVCS and STEREO data”, Susino R., **Bemporad A.**, Dolei S., Vourlidis A., *Adv. Space Res.*, 52 (5), 957, 2013.  
<https://ui.adsabs.harvard.edu/#abs/2013AdSpR..52..957S/abstract>
77. “Super- and sub-critical regions in shocks driven by radio-loud and radio-quiet CMEs”, **Bemporad A.** & Mancuso S., *Journ. of Adv. Res.*, 4 (3), 287, 2013.  
<https://ui.adsabs.harvard.edu/#abs/2013JAdR....4..287B/abstract>
78. “SWIFF: Space Weather Integrated Forecasting Framework”, Lapenta G., Pierrard V., Keppens R., Markidis S., Poedts S., Šebek O., Trávníček P.M., Henri P., Califano F., Pegoraro F., Faganello M., Olshevsky V., Restante A., Nordlund A., Frederiksen J.T., Mackay D.H., Parnell C.E., **Bemporad A.**, Susino R. and Borremans K., *Journal of Space Weather and Space Climate*, 3, id.A05, 2013.  
<https://ui.adsabs.harvard.edu/#abs/2013JSWSC...3A..05L/abstract>
79. “Study of Multiple Coronal Mass Ejections at Solar Minimum Conditions”, **Bemporad A.**, Zuccarello F.P., Jacobs C., Mierla M., Poedts S., *Sol. Phys.*, 281, 223, 2012.  
<https://ui.adsabs.harvard.edu/#abs/2012SoPh..281..223B/abstract>
80. “Spectroscopic Signature of Alfvén Waves Damping in a Polar Coronal Hole up to 0.4 Solar Radii”, **Bemporad A.** & Abbo L., *ApJ*, 751, 110, 2012.  
<https://ui.adsabs.harvard.edu/#abs/2012ApJ...751..110B/abstract>
81. “Solar magnetism eXplorer (SolmeX). Exploring the magnetic field in the upper atmosphere of our closest star”, Hardi P., Abbo L., Andretta V., Auchère F., **Bemporad A.**, and 34 coauthors, *Experimental Astronomy*, 33, 271, 2012.  
<https://ui.adsabs.harvard.edu/#abs/2012ExA....33..271P/abstract>
82. “The Role of Streamers in the Deflection of Coronal Mass Ejections: Comparison between STEREO Three-dimensional Reconstructions and Numerical Simulations”, Zuccarello F. P., **Bemporad A.**, Jacobs C., Mierla M., Poedts S., *ApJ*, 744, 66, 2012.

- <https://ui.adsabs.harvard.edu/#abs/2012ApJ...744...66Z/abstract>  
83. “Identification of Super- and Subcritical Regions in Shocks Driven by Coronal Mass Ejections”, **Bemporad A.** & Mancuso S., ApJ, 739, L64, 2011.
- <https://ui.adsabs.harvard.edu/#abs/2011ApJ...739L..64B/abstract>  
84. “Rotation of an erupting filament observed by STEREO EUVI and COR1 instruments”, **Bemporad A.**, Mierla M., Tripathi D., A&A, 531, id.A147, 2011.
- <https://ui.adsabs.harvard.edu/#abs/2011A%26A...531A.147B/abstract>  
85. “Prominence 3D reconstruction in the STEREO era: A review”, **Bemporad A.**, Journ. of Atmosph. & Sol.-Terr. Phys., 73, 1117, 2011.
- <https://ui.adsabs.harvard.edu/#abs/2011JASTP..73.1117B/abstract>  
86. “Side Magnetic Reconnections Induced by Coronal Mass Ejections: Observations and Simulations”, **Bemporad A.**, Soenen A., Jacobs C., Landini F., Poedts, S., ApJ, 718, 251, 1010.
- <https://ui.adsabs.harvard.edu/#abs/2010ApJ...718..251B/abstract>  
87. “First Complete Determination of Plasma Physical Parameters Across a Coronal Mass Ejection-driven Shock”, **Bemporad A.**, & Mancuso S., ApJ, 720, 130, 2010.
- <https://ui.adsabs.harvard.edu/#abs/2010ApJ...720..130B/abstract>  
88. “Stereoscopic Reconstruction from STEREO/EUV Imagers Data of the Three-dimensional Shape and Expansion of an Erupting Prominence”, **Bemporad A.**, ApJ, 701, 298, 2009.
- <https://ui.adsabs.harvard.edu/#abs/2009ApJ...701..298B/abstract>  
89. “Multispacecraft observations of a Prominence Eruption”, **Bemporad A.**, Del Zanna G., Andretta V., Poletto G., Magri M., Ann. Geophys., 27, 3841, 2009.
- <https://ui.adsabs.harvard.edu/#abs/2009AnGeo..27.3841B/abstract>  
90. “The role of lateral magnetic reconnection in solar eruptive events”, Soenen A., **Bemporad A.**, Jacobs C., Poedts S., Ann. Geophys., 27, 3941, 2009.
- <https://ui.adsabs.harvard.edu/#abs/2009AnGeo..27.3941S/abstract>  
91. “Interpretation of the SOHO/UVCS Observations of two CME-driven Shocks”, Mancuso S. & **Bemporad A.**, Adv. Space Res., 44, 451, 2009.
- <https://ui.adsabs.harvard.edu/#abs/2009AdSpR..44.451M/abstract>  
92. “Morphology and Density of post-CME Current Sheets”, Vršnak B., Poletto G., Vujić E., Vourlidas A., Ko Y.-K., Raymond J. C., Ciaravella A., Žic T., Webb D. F., **Bemporad A.**, Landini F., Schettino G., Jacobs C., Suess S. T., A&A, 499, 905, 2009.
- <https://ui.adsabs.harvard.edu/#abs/2009A%26A...499..905V/abstract>  
93. “Spectroscopic detection of turbulence in post-CME Current Sheets”, **Bemporad A.**, ApJ, 689, 572, 2008.
- <https://ui.adsabs.harvard.edu/#abs/2008ApJ...689..572B/abstract>  
94. “Reconnection in a slow Coronal Mass Ejection”, Poletto G., **Bemporad A.**, Landini F., Romoli M., Ann. Geoph., 26, 3067, 2008.
- <https://ui.adsabs.harvard.edu/#abs/2008AnGeo..26.3067P/abstract>  
95. “Magnetic Reconnection processes induced by a CME expansion”, **Bemporad A.**, Poletto G., Landini F., Romoli M., Ann. Geoph., 26, 10, 2008.
- <https://ui.adsabs.harvard.edu/#abs/2008AnGeo..26.3017B/abstract>  
96. “Low-frequency Lyman- $\alpha$  power spectra observed by UVCS in a polar coronal hole”, **Bemporad A.**, Matthaeus W. H., Poletto G., ApJL, 677, 137, 2008.
- <https://ui.adsabs.harvard.edu/#abs/2008ApJ...677L.137B/abstract>  
97. “A Comprehensive Study of the Initiation and Early Evolution of a CME from UV and White Light Data”, **Bemporad A.**, Raymond J. C., Poletto G., Romoli M., ApJ, 655, 576, 2007.
- <https://ui.adsabs.harvard.edu/#abs/2007ApJ...655..576B/abstract>  
98. “Density and magnetic field signatures of interplanetary 1/f noise”, Matthaeus W. H., Breech B., Dmitruk P., **Bemporad A.**, Poletto G., Velli M., Romoli M., ApJL, 657, 121, 2007.
- <https://ui.adsabs.harvard.edu/#abs/2007ApJ...657L.121M/abstract>  
99. “A review of SOHO/UVCS observations of sungrazing comets”, **Bemporad A.**, Poletto G., Raymond J. C., Giordano S., Planetary & Space Sc., 55, 1021, 2007.
- <https://ui.adsabs.harvard.edu/#abs/2007P%26SS...55.1021B/abstract>  
100. “Current sheet evolution in the aftermath of a CME event”, **Bemporad A.**, Poletto G., Suess S.T., Ko Y.-K., Schwadron N.A., Elliott H.A., Raymond J.C., ApJ, 638, 1110, 2006.
- <https://ui.adsabs.harvard.edu/#abs/2006ApJ...638.1110B/abstract>  
101. "Evidence for pyroxene dust grains in C/2001 C2 sungrazing comet", **Bemporad A.**, Poletto G., Raymond J.C., Advances in Space Research, Vol. 38, Issue 9, pp. 1972-1975, 2006.

<https://ui.adsabs.harvard.edu/#abs/2006AdSpR..38.1972B/abstract>

102. “Lyman- $\alpha$  observations of sungrazing comets with the SOHO/UVCS instruments”, **Bemporad A.**, Poletto G., Raymond J. C., Giordano S., Adv. in Geosc., vol.3 "Planetary Science", 171, 2005.

<https://ui.adsabs.harvard.edu/#abs/2006aogs....3..171B/abstract>

103. “A new variety of CMEs: streamer puffs”, **Bemporad A.**, Moore R. T., Sterling A. C., Poletto G., ApJL, v635, 189, 2005.

<https://ui.adsabs.harvard.edu/#abs/2005ApJ...635L.189B/abstract>

104. “UVCS observation of sungrazer C/2001 C2: possible comet fragmentation and plasma-dust interactions”, **Bemporad A.**, Poletto G., Raymond J. C., Biesecker D. A., Ko Y. K., P. Lamy, Marsden B., Uzzo M., ApJ, v620, 2005.

<https://ui.adsabs.harvard.edu/#abs/2005ApJ...620..523B/abstract>

105. “Evidence for the same hot plasma after CME events in both remote and in situ observations”, Poletto G., Suess S., **Bemporad A.**, Zurbuchen T., Ko Y. K., ApJL, v613, L173, 2004.

<https://ui.adsabs.harvard.edu/#abs/2004ApJ...613L.173P/abstract>

106. “A slow streamer blowout at the Sun and Ulysses”, Suess S. T., **Bemporad A.**, Poletto G., GRL, v. 31, Issue 5, CiteID L05801, 2004.

<https://ui.adsabs.harvard.edu/#abs/2004GeoRL..31.5801S/abstract>

107. “Temporal evolution of a Streamer Complex: Coronal and in situ Plasma Parameters”, **Bemporad A.**, Poletto G., Suess S.T., Ko Y-K., Parenti S., Riley P., Romoli M., Zurbuchen T.Z., ApJ, v593, 2003.

<https://ui.adsabs.harvard.edu/#abs/2003ApJ...593.1146B/abstract>

#### • CONFERENCE PROCEEDINGS

1. “The Heliospheric Space Weather Center: A novel space weather service”, Casti, M., Mulone, A.F., Susino, R., and 12 coauthors, Proceedings of “SOHE3” meeting, Turin, 38 – 31 October 2018, Il Nuovo Cimento C, Volume 42, Issue 1, article id. 48, 2019.

<https://ui.adsabs.harvard.edu/#abs/2019NCimC..42...48C/abstract>

2. “Determination of the physical properties of an erupting prominence from SOHO/LASCO and UVCS observations”, Susino, R., **Bemporad, A.**, Heinzel, P., and 3 coauthors, Proceedings of “SOHE3” meeting, Turin, 38 – 31 October 2018, Il Nuovo Cimento C, Volume 42, Issue 1, article id. 37, 2019.

<https://ui.adsabs.harvard.edu/#abs/2019NCimC..42...37S/abstract>

3. “Measuring the 2D distribution of the expansion speed of solar eruptions: A first test based on synthetic coronagraphic data”, Ying, B., **Bemporad, A.**, Giordano, S., Pagano, P., Feng, L., Proceedings of “SOHE3” meeting, Turin, 38 – 31 October 2018, Il Nuovo Cimento C, Volume 42, Issue 1, article id. 36, 2019.

<https://ui.adsabs.harvard.edu/#abs/2019NCimC..42...36Y/abstract>

4. “Kinematics of a compression front associated with a Coronal Mass Ejection”, Frassati, F., Susino, R., Mancuso, S., **Bemporad, A.**, Proceedings of “SOHE3” meeting, Turin, 38 – 31 October 2018, Il Nuovo Cimento C, Volume 42, Issue 1, article id. 35, 2019.

<https://ui.adsabs.harvard.edu/#abs/2019NCimC..42...35F/abstract>

5. “Metrology on-board PROBA-3: The Shadow Position Sensor (SPS) subsystem”, Noce, V., Romoli, M., Focardi, M., and 11 coauthors, Proceedings of “SOHE3” meeting, Turin, 38 – 31 October 2018, Il Nuovo Cimento C, Volume 42, Issue 1, article id. 27, 2019.

<https://ui.adsabs.harvard.edu/#abs/2019NCimC..42...27N/abstract>

6. “AntarctiCor: Solar Coronagraph in Antarctica for the ESCAPE Project”, Fineschi, S.; Capobianco, G.; Massone, G., and 11 coauthors, Proceedings of “SOHE3” meeting, Turin, 38 – 31 October 2018, Il Nuovo Cimento C, Volume 42, Issue 1, article id. 26, 2019.

<https://ui.adsabs.harvard.edu/#abs/2019NCimC..42...26F/abstract>

7. “Preface”, Bemporad, A.; Criscuoli, S.; Del Moro, D., and 6 coauthors, Proceedings of “SOHE3” meeting, Turin, 38 – 31 October 2018, Il Nuovo Cimento C, Volume 42, Issue 1, article id. 1, 2019.

<https://ui.adsabs.harvard.edu/#abs/2019NCimC..42....1B/abstract>

8. “Distributed framework for Space Weather forecasts”, Mulone, A.F., Casti, M., Susino, R., and 11 coauthors, Proceedings of EPSC-DPS Joint Meeting 2019, Vol. 13, EPSC-DPS2019-1997-1, 2019.

<https://ui.adsabs.harvard.edu/#abs/2019EPSC...13.1997F/abstract>

9. “Data Integration of Remote Sensing and In Situ Data from several Solar Space Missions for Space Weather Services”, Casti, M., Fineschi, S., Messineo, R., Antonucci, E., Mulone, A.F., **Bemporad, A.**,

and 7 coauthors, Proceedings of the 2017 conference on Big Data from Space (BiDS'17), Toulouse, France 28–30 November 2017, 2017.

<https://ui.adsabs.harvard.edu/abs/2018cosp...42E.268B/abstract>

10. “Temporal Characterization of the Remote Sensors Response to Radiation Damage in L2”, De March, R., Busonero, D., Messineo, R., **Bemporad, A.**, and 4 coauthors, Proceedings of the 2016 conference on Big Data from Space (BiDS'16), Santa Cruz de Tenerife, Spain 15–17 March 2016, 2016.  
<https://ui.adsabs.harvard.edu/#abs/2017arXiv170905130D/abstract>
11. “A decade of coronagraphic and spectroscopic studies of CME-driven shocks”, Vourlidis A. & **Bemporad A.**, Proc. of the 10<sup>th</sup> AIP Conferenc, 1436, 279, 2012.  
<https://ui.adsabs.harvard.edu/#abs/2012AIPC.1436..279V/abstract>
12. “The solar orbiter METIS coronagraph data signal processing chain”, Pancrazzi M., Focardi M., Uslenghi M., Nicolini G., Magli E., Landini F., Romoli M., **Bemporad A.**, and 6 coauthors, Proceedings of the SPIE, 8167, 81672C, 2011.  
<https://ui.adsabs.harvard.edu/#abs/2011SPIE.8167E..2CP/abstract>
13. “Liquid crystals Lyot filter for solar coronagraphy”, Fineschi S., Capobianco G., Massone G., Baur T., **Bemporad A.**, Abbo L., Zangrilli L., Dadeppo V., Proceedings of the SPIE, 8148, 814808, 2011.  
<https://ui.adsabs.harvard.edu/#abs/2011SPIE.8148E..08F/abstract>
14. “An erupting filament and associated CME observed by Hinode, STEREO and SOHO”, **Bemporad A.**, Del Zanna G., Andretta V., Magri M., Poletto G., Ko Y.-K., Proceedings of the “2<sup>nd</sup> Hinode Science Meeting”, Boulder (CO), September 29 – October 3, 2009.  
<https://ui.adsabs.harvard.edu/#abs/2009ASPC..415..385B/abstract>
15. “Multi-instruments campaigns to observe the off-limb corona”, Del Zanna G., Andretta V., Poletto G., Teriaca L., Ko Y.-K., Mason H.E., Vourlidis A., **Bemporad A.**, Magri M., Proceedings of the “2<sup>nd</sup> Hinode Science Meeting”, Boulder (CO), September 29 – October 3, 2009.  
<https://ui.adsabs.harvard.edu/#abs/2009ASPC..415..315D/abstract>
16. “Comparison of Large-Scale Density Fluctuations in the Outer Corona and in the Inner Heliosphere for Both Fast and Slow Solar Wind”, Telloni, D., Bruno, R., Antonucci, E., D'Amicis, R., **Bemporad, A.**, Proceedings of the “AGU Fall Meeting 2008”, San Francisco, 15 – 19 December, 2008.
17. “Results from recent studies of CMEs with SOHO/UVCS”, **Bemporad A.**, Poletto G., Proceedings of the “LI Congresso della SAIIT”, Firenze (Italy), 2007.  
<https://ui.adsabs.harvard.edu/#abs/2007MmSAI..78..600B/abstract>
18. “SOHO/UVCS and Mauna Loa Mark IV observations of a slow CME below 2 solar radii”, **Bemporad A.**, Poletto G., Raymond J. C., Proceedings of the “SOHO 17” Meeting, Giardini Naxos (Italy), Edited by H. Lacoste and L. Ouweland. ESA SP-617, Published on CDROM, p.24.1, 2006.  
<https://ui.adsabs.harvard.edu/#abs/2006ESASP.617E..24B/abstract>
19. “Structure of a slow CME in the low corona”, **Bemporad A.**, Poletto G., Raymond J. C., Proceedings of the “IV Convegno della Ricerca Italiana in Fisica Solare”, Trieste, 2005.
20. “Current Sheet Evolution in the Aftermath of a CME”, **Bemporad A.**, Poletto G., Sess S.T., et al., Proceedings of the Solar Wind 11 / SOHO 16, “Connecting Sun and Heliosphere” Conference (ESA SP-592). 12 - 17 June 2005 Whistler, Canada. Edited by B. Fleck, T. H. Zurbuchen and H. Lacoste. Published by ESA Publications Division, ESTEC, Postbus 299, 2200 AG Noordwijk, The Netherlands, p.715, 2005.  
<https://ui.adsabs.harvard.edu/#abs/2005ESASP.592..715B/abstract>
21. “Early Evolution of a CME from White Light and UV Observations”, **Bemporad A.**, Poletto G., Raymond J.C., Proceedings of the Solar Wind 11 / SOHO 16, “Connecting Sun and Heliosphere” Conference (ESA SP-592). 12 - 17 June 2005 Whistler, Canada. Editors: B. Fleck, T.H. Zurbuchen, H. Lacoste. Published by ESA Publications Division, ESTEC, Postbus 299, 2200 AG Noordwijk, The Netherlands, p. 711, 2005.  
<https://ui.adsabs.harvard.edu/#abs/2005ESASP.592..711B/abstract>
22. “Recursive narrow CMEs within a coronal streamer”, **Bemporad A.**, Sterling A. C., Moore R. T., Poletto G., Proceedings del “11<sup>th</sup> Solar Physics Meeting”, Editors: D. Danesy, S. Poedts, A. De Groof and J. Andries. Published on CDROM., p.153, 2005.  
<https://ui.adsabs.harvard.edu/abs/2005ESASP.600E.153B/abstract>
23. “Post-CME events: cool jets and current sheet evolution”, **Bemporad A.**, Poletto G., Suess S.T., IAU 226 Symposium Proceedings, Cambridge University Press, pp. 77-82, 2005.  
<https://ui.adsabs.harvard.edu/#abs/2005IAUS..226...77B/abstract>
24. “Evidence for Pyroxene dust grains in C/2001 C2 sungrazing comet”, **Bemporad A.**, Poletto G., Raymond J. C., Proceedings del “XXXV Cospar Meeting”, Paris, p.3526, 2005.

- <https://ui.adsabs.harvard.edu/#abs/2006AdSpR..38.1972B/abstract>
25. “A Detection of the Same Hot Plasma in the Corona - During a CME - and Later at Ulysses”, Suess, S., Poletto, G., **Bemporad, A.**, AGU Fall Meeting 2004 Proceedings (Abstract num. SH21B-0402), 2004.  
<https://ui.adsabs.harvard.edu/#abs/2004AGUFMSH21B0402S/abstract>
  26. “Preliminary analysis of a CME observed by SOHO and Ulysses experiments”, **Bemporad A.**, Poletto G., Romoli M., Suess S.T., ISCS 2003 Symposium, ESA Publications Division, ISBN 92-9092-845-X, pp. 567 - 570, 2003.  
<https://ui.adsabs.harvard.edu/#abs/2003ESASP.535..567B/abstract>
  27. “Physical parameters of coronal streamers near the maximum phase of solar cycle”, **Bemporad A.**, Poletto G., Romoli M., Mem. S.A.It., v.74, p. 721, 2003.  
<https://ui.adsabs.harvard.edu/#abs/2003MmSAI..74..721B/abstract>
  28. “Spatial and temporal behavior of the oxygen abundance in a streamer complex”, **Bemporad A.**, Poletto G., Romoli M., In: Solar variability: from core to outer frontiers., ESA SP-506, p.545-548, 2002.  
<https://ui.adsabs.harvard.edu/#abs/2002ESASP.506..545B/abstract>

- **TECHNICAL PAPERS**

1. “Theoretical, on-ground, and in-flight study of the Metis coronagraph vignetting”, Casini, C., Chioetto, P., De leo, Y., and 31 co-authors, Proceedings of the SPIE, Volume 12777, id. 1277705, 2023.  
<https://ui.adsabs.harvard.edu/abs/2023SPIE12777E..05C/abstract>
2. “In-flight Metis radiometric performance verification using the light retro-reflected from its door”, Casini, C., and 33 coauthors, Proceedings of the SPIE, Volume 12180, id. 121803E, 2022.  
<https://ui.adsabs.harvard.edu/abs/2022SPIE12180E..3EC/abstract>
3. “Laboratory testbed for the calibration and the validation of the shadow position sensor subsystem of the PROBA3 ESA mission”, Loreggia, D., and 13 coauthors, Proceedings of the SPIE, Volume 11852, id. 118526Q, 2021.  
<https://ui.adsabs.harvard.edu/abs/2021SPIE11852E..6QL/abstract>
4. “Formation flying performances simulator for the shadow position sensors of the ESA PROBA-3 mission”, Capobianco, G., and 12 coauthors, Proceedings of the SPIE, Volume 11852, id. 118526P, 2021.  
<https://ui.adsabs.harvard.edu/abs/2021SPIE11852E..6PC/abstract>
5. “On-ground flat-field calibration of the Metis coronagraph onboard the Solar Orbiter ESA mission”, Casini, C., and 33 coauthors, Proceedings of the SPIE, Volume 11852, id. 118525B, 2021.  
<https://ui.adsabs.harvard.edu/abs/2021SPIE11852E..5BC/abstract>
6. “Challenges during Metis-Solar Orbiter commissioning phase”, Romoli, M., Andretta, V., Bemporad, A., and 28 coauthors, Proceedings of the SPIE, Volume 11852, id. 118525A, 2021.  
<https://ui.adsabs.harvard.edu/abs/2021SPIE11852E..5AR/abstract>
7. “In-flight calibration of Metis coronagraph on board of Solar Orbiter”, Liberatore, A., and 30 coauthors, Proceedings of the SPIE, Volume 11852, id. 1185248, 2021.  
<https://ui.adsabs.harvard.edu/abs/2021SPIE11852E..48L/abstract>
8. “First-light Science Observations of the Metis Solar Coronagraph”, Fineschi, S., and 9 coauthors, Proceedings of the SPIE, Volume 11852, id. 1185211, 2021.  
<https://ui.adsabs.harvard.edu/abs/2021SPIE11852E..11F/abstract>
9. “In-flight optical performance assessment for the Metis solar coronagraph”, Da Deppo, V., and 32 coauthors, Proceedings of the SPIE, Volume 11852, id. 1185210, 2021.  
<https://ui.adsabs.harvard.edu/abs/2021SPIE11852E..10D/abstract>
10. “PROBA-3 formation-flying metrology: algorithms for the shadow position sensor system”, Casti, M., **Bemporad, A.**, Fineschi, S., and 7 coauthors, SPIE, 11180, id. 1118082, 2019.  
<https://ui.adsabs.harvard.edu/#abs/2019SPIE11180E..82C/abstract>
11. “Formation flying metrology system for the ESA-PROBA3 mission: the Shadow Positioning Sensors (SPS)”, Loreggia, D., Fineschi, S., **Bemporad, A.**, and 22 coauthors, SPIE, 10695, id. 1069503, 2018.  
<https://ui.adsabs.harvard.edu/abs/2018SPIE10695E..03L/abstract>
12. “Development of ASPIICS: a coronagraph based on Proba-3 formation flying mission”, Galano, D., **Bemporad, A.**, Buckley, S., and 31 coauthors, SPIE, 10698, id. 106982Y, 2018.  
<https://ui.adsabs.harvard.edu/#abs/2018SPIE10698E..2YG/abstract>
13. “Metis: the Visible and UV Coronagraph for Solar Orbiter”, Romoli, M., Landini, F., Antonucci, E., and 26 coauthors, SPIE, 10563 105631M-2, 2017.  
<https://ui.adsabs.harvard.edu/#abs/2017SPIE10563E..1MR/abstract>

14. “Test plan for the PROBA3/ASPIICS scaled model measurement campaign”, Landini F., Baccani, C., Vives S., and 14 coauthors, SPIE, 10397, id. 103971C, 2017.  
<https://ui.adsabs.harvard.edu/#abs/2017SPIE10397E..1CL/abstract>
15. “An improved version of the Shadow Position Sensor readout electronics on-board the ESA PROBA-3 Mission”, Noce, V.; Focardi, M.; Buckley, S.; **Bemporad, A.**, and 12 coauthors, SPIE, 10397, id. 103971B, 2017.  
<https://ui.adsabs.harvard.edu/#abs/2017SPIE10397E..1BN/abstract>
16. “The satellite formation flying in lab: PROBA-3/ASPIICS metrology subsystems test-bed”, Capobianco, G., Loreggia, D., Fineschi, S., Focardi, M., **Bemporad, A.**, and 17 coauthors, SPIE, 9904, id. 99046E, 2016.  
<https://ui.adsabs.harvard.edu/#abs/2016SPIE.9904E..6EC/abstract>
17. “Characterization of the ASPIICS/OPSE metrology sub-system and PSF centroiding procedure”, Loreggia, D., Fineschi, S., Capobianco, G., **Bemporad, A.**, and 15 coauthors, SPIE, 9904, id. 99045O, 2016.  
<https://ui.adsabs.harvard.edu/#abs/2016SPIE.9904E..5OL/abstract>
18. “Preliminary evaluation of the diffraction behind the PROBA 3/ASPIICS optimized occulter”, Baccani, C., Landini, F., Romoli, M., Taccola, M., Schweitzer, H., Fineschi, S., **Bemporad, A.**, and 8 coauthors, SPIE, 9904, id. 990450, 2016.  
<https://ui.adsabs.harvard.edu/#abs/2016SPIE.9904E..50B/abstract>
19. “The shadow position sensors (SPS) formation flying metrology subsystem for the ESA PROBA-3 mission: present status and future developments”, Focardi, M., Noce, V., Buckley, S., O'Neill, K., **Bemporad, A.**, and 15 coauthors, SPIE, 9904, id. 99044Z, 2015.  
<https://ui.adsabs.harvard.edu/#abs/2016SPIE.9904E..4ZF/abstract>
20. “OPSE metrology system onboard of the PROBA3 mission of ESA”, Loreggia, D., **Bemporad, A.**, Capobianco, G., and 13 coauthors, SPIE, 9604, id. 96040F, 2015.  
<https://ui.adsabs.harvard.edu/#abs/2015SPIE.9604E..0FL/abstract>
21. “Significance of the occulter diffraction for the PROBA3/ASPIICS formation flight metrology”, Landini, F., **Bemporad, A.**, Focardi, M., and 12 coauthors, SPIE, 9604, id. 96040E, 2015.  
<https://ui.adsabs.harvard.edu/#abs/2015SPIE.9604E..0EL/abstract>
22. “Formation flying metrology for the ESA-PROBA3 mission: the Shadow Position Sensors (SPS) silicon photomultipliers (SiPMs) readout electronics”, Focardi, M., **Bemporad, A.**, Buckley, S., and 14 coauthors, SPIE, 9604, id. 96040D, 2015.  
<https://ui.adsabs.harvard.edu/#abs/2015SPIE.9604E..0DF/abstract>
23. “The Shadow Positioning Sensors (SPS) for formation flying metrology on-board the ESA-PROBA3 mission”, **Bemporad, A.**, Baccani, C., Capobianco, G., and 14 coauthors, SPIE, 9604, id. 96040C, 2015.  
<https://ui.adsabs.harvard.edu/#abs/2015SPIE.9604E..0CB/abstract>
24. “Design status of ASPIICS, an externally occulted coronagraph for PROBA-3”, Renotte, E., Alia, A., **Bemporad, A.**, and 81 coauthors, SPIE, 9604, id. 96040A, 2015.  
<https://ui.adsabs.harvard.edu/#abs/2015SPIE.9604E..0AR/abstract>
25. “Polarimetric calibrations and astronomical polarimetry in the V-band with Solar Orbiter/METIS instrument”, Capobianco, G., Fineschi, S., Focardi, M., Andretta, V., Massone, G., **Bemporad, A.**, and 6 coauthors, SPIE, 9143, id. 91434V, 2014.  
<https://ui.adsabs.harvard.edu/#abs/2014SPIE.9143E..4VC/abstract>
26. “ASPIICS: an externally occulted coronagraph for PROBA-3: Design evolution”, Renotte, E., Baston, E. C. **Bemporad, A.**, and 39 coauthors, SPIE, 9143, id. 91432M, 2014.  
<https://ui.adsabs.harvard.edu/#abs/2014SPIE.9143E..2MR/abstract>
27. “On-board detection and removal of cosmic ray and solar energetic particle signatures for the Solar Orbiter-METIS coronagraph”, Andretta, V.; **Bemporad, A.**; Focardi, M., and 13 coauthors, SPIE, 9152, id. 91522Q, 2014.  
<https://ui.adsabs.harvard.edu/#abs/2014SPIE.9152E..2QA/abstract>
28. “On-board CME detection algorithm for the Solar Orbiter-METIS coronagraph”, **Bemporad, A.**, Andretta, V., Pancrazzi, M., and 13 coauthors, SPIE, 9152, id. 91520K, 2014.  
<https://ui.adsabs.harvard.edu/#abs/2014SPIE.9152E..0KB/abstract>
29. “Hardware and software architecture on board solar orbiter/METIS: an update”, Pancrazzi, M., Focardi, M., Nicolini, G., Andretta, V., Uslenghi, M., Magli, E., Ricci, M., **Bemporad, A.**, and 8 coauthors, SPIE, 9144, id. 91443F, 2014.  
<https://ui.adsabs.harvard.edu/#abs/2014SPIE.9144E..3FP/abstract>

30. “In-flight UV and polarized-VL radiometric calibrations of the solar orbiter/METIS imaging coronagraph”, Focardi, M., Capobianco, G., Andretta, V., Sasso, C., Romoli, M., Landini, F., Fineschi, S., Pancrazzi, M., **Bemporad, A.**, and 9 coauthors, SPIE, 9144, id. 914409, 2014.  
<https://ui.adsabs.harvard.edu/#abs/2014SPIE.9144E..09F/abstract>
31. “Novel Space Coronagraphs: METIS, a flexible optical design for multi-wavelength imaging and spectrography”, Fineschi S., Antonucci E., Romoli M., **Bemporad A.**, and 22 coauthors, SPIE, 8862, 88620G, 2013.  
<https://ui.adsabs.harvard.edu/#abs/2013SPIE.8862E..0GF/abstract>
32. “MESSI, the METIS instrument Software Simulator”, Nicolini G., Andretta V., Abbo L., Antonucci E., **Bemporad A.**, and 12 coauthors, SPIE, 8449, 84491L, 2012.  
<https://ui.adsabs.harvard.edu/#abs/2012SPIE.8449E..1LN/abstract>
33. “Multi Element Telescope for Imaging and Spectroscopy (METIS) coronagraph for the Solar Orbiter mission”, Antonucci E., Fineschi S., Naletto G., Romoli M., Spadaro D., Nicolini G., Nicolosi P., Abbo L., Andretta V., **Bemporad A.**, and 24 coauthors, SPIE, 8443, 844309, 2012.  
<https://ui.adsabs.harvard.edu/#abs/2012SPIE.8443E..09A/abstract>
34. “METIS: a novel coronagraph design for the Solar Orbiter mission”, Fineschi S., Antonucci E., Naletto G., Romoli M., Spadaro D., Nicolini G., Abbo L., Andretta V., **Bemporad A.**, and 18 coauthors, SPIE, 8443, 84433H, 2012.  
<https://ui.adsabs.harvard.edu/#abs/2012SPIE.8443E..3HF/abstract>
35. “The solar orbiter METIS coronagraph data signal processing chain”, Pancrazzi M., Focardi M., Uslenghi M., Nicolini G., Magli E., Landini F., Romoli M., **Bemporad A.**, and 6 coauthors, SPIE, 8167, 81672C, 2011.  
<https://ui.adsabs.harvard.edu/#abs/2011SPIE.8167E..2CP/abstract>
36. “Liquid crystals Lyot filter for solar coronagraphy”, Fineschi S., Capobianco G., Massone G., Baur T., **Bemporad A.**, Abbo L., Zangrilli L., Dadeppo V., SPIE, 8148, 814808, 2011.  
<https://ui.adsabs.harvard.edu/#abs/2011SPIE.8148E..08F/abstract>

- **TECHNICAL REPORTS**

1. “SWELTO - Space WEather Laboratory in Turin Observatory”, Bemporad, A., and 22 coauthors, eprint arXiv:2101.07037, 2021.  
<https://ui.adsabs.harvard.edu/abs/2021arXiv210107037B/abstract>
2. “Automatic Identification of EUV structures on the Sun with a Fuzzy Clustering Algorithm”, Carella, F., & Bemporad, A., INAF Tec. Rep. n. 27, 2020.  
<https://openaccess.inaf.it/handle/20.500.12386/26079>
3. “Search of possible correlations between the strength of geomagnetic storms and interplanetary magnetic field measurements”, Andriuta, D., Bemporad, A., Tec. Rep. n. 183, 2018.  
<https://openaccess.inaf.it/handle/20.500.12386/690>
4. “The 2017 Great American Eclipse: first report on the observational campaign”, **Bemporad A.**, Abbo L., Benna C., Tec. Rep. n. 177, 2017.  
<https://openaccess.inaf.it/handle/20.500.12386/684>
5. “Implementation of a CME flag for METIS: further tests on various transient emission sources”, **Bemporad A.**, Tec. Rep. n. 174, 2016.  
<https://openaccess.inaf.it/handle/20.500.12386/680>
6. “Implementation of a CME flag for METIS: first tests”, **Bemporad A.**, Tec. Rep. n. 173, 2016.  
<https://openaccess.inaf.it/handle/20.500.12386/680>
7. “Simulation of Visible Light and UV images for the METIS coronagraph”, **Bemporad A.**, Tec. Rep. n. 167, 2014.  
<https://openaccess.inaf.it/handle/20.500.12386/674>
8. “Coronagraphic WL and UV observations of CMEs: requirements for the development of future instrumentation”, **Bemporad A.**, Tec. Rep. n. 165, 2013.  
<https://openaccess.inaf.it/handle/20.500.12386/672>
9. “Comparative evaluation of METIS image compression algorithms”, **Bemporad A.**, Tec. Rep. n. 157, 2012.  
<https://openaccess.inaf.it/handle/20.500.12386/664>

10. "Total Solar Eclipse of July 11th, 2010: Data Log And Raw Images", Fineschi, S., Massone G., Capobianco G., Benna C., Calcidese P., Romoli M., Casetti L., Abbo L., **Bemporad A.**, Tec. Rep. n. 144, 2010.  
<https://openaccess.inaf.it/handle/20.500.12386/651>
11. "Estimate of the FeXIV  $\lambda$ 5303 coronal "green line" radiances for the PROBA-3 ASPIICS coronagraph", **Bemporad A.**, Tec. Rep. n. 134, 2010.  
<https://openaccess.inaf.it/handle/20.500.12386/641>
12. "Simulation of H Lyman-alpha images for the METIS coronagraph", **Bemporad A.**, Tec. Rep. n. 132, 2010.  
<https://openaccess.inaf.it/handle/20.500.12386/639>
13. "The orbit of Solar Orbiter: characterization and implications for the METIS coronagraph (part I)", **Bemporad A.**, Tec. Rep. n. 125, 2009.  
<https://openaccess.inaf.it/handle/20.500.12386/632>
14. "Uncertainties in the estimate of SiXI  $\lambda$ 303.32 and HeII  $\lambda$ 303.78 lines contribution to the coronal emission observed by the SCORE coronagraph", **Bemporad A.**, Tec. Rep. n. 127, 2009.  
<https://openaccess.inaf.it/handle/20.500.12386/634>

- **OUTREACH PUBLICATIONS**

1. "Eclissi di Sole: dalle suggestioni del passato alla scienza del futuro", **Bemporad A.**, Zangrilli L., Fineschi S., Coelum, vol. 216, pp. 68-83, 2017.  
<https://view.joomag.com/coelum-astronomia-213-2017/0551048001497618770/p54>
2. "Quasi tutto pronto per la missione della sonda Solar Orbiter", **Bemporad A.** & Azzità E., La Rivista, aprile 2017.  
<http://www.go-italy.net/item/incontro-con-lastrofisico-alessandro-bemporad/87/4535>
3. "Solar Orbiter: nuovi punti di vista", **Bemporad A.** & Azzità E., Le Stelle, vol. 169, pp. 30-33, 2017.  
[https://archivio.bfcspace.com/index.php?p=le\\_stelle&num=169](https://archivio.bfcspace.com/index.php?p=le_stelle&num=169)
4. "La nostra stella vista da vicino", **Bemporad A.**, Le Stelle, vol. 158, pp. 44-49, 2016.  
[https://archivio.bfcspace.com/index.php?p=le\\_stelle&num=158](https://archivio.bfcspace.com/index.php?p=le_stelle&num=158)
5. "L'Europa verso il sole con Solar Orbiter", **Bemporad A.** & Lo Campo A., Nuovo Orione, n. 289, pp. 35-39, 2016.  
[https://archivio.bfcspace.com/index.php?p=nuovo\\_orione&num=289](https://archivio.bfcspace.com/index.php?p=nuovo_orione&num=289)
6. "Prevedere le Tempeste Spaziali", **Bemporad A.**, Berrilli F., Carbone V., Consolini G., De Michelis P., Zuccarello F., Le Stelle, vol. 148, pp. 36-41, 2015.  
[https://archivio.bfcspace.com/index.php?p=le\\_stelle&num=148](https://archivio.bfcspace.com/index.php?p=le_stelle&num=148)
7. "Sole, Terra, Umanità – uniti in un solo destino", **Bemporad A.** & Azzità E., Le Stelle, vol. 134, pp. 55-59, 2014.  
[https://archivio.bfcspace.com/index.php?p=le\\_stelle&num=134](https://archivio.bfcspace.com/index.php?p=le_stelle&num=134)
8. "Alessandro Bemporad, una grande passione per la nostra stella", **Bemporad A.**, & Razzano M., Le Stelle, vol. 103, pp. 44-47, 2012.  
[https://archivio.bfcspace.com/index.php?p=le\\_stelle&num=103](https://archivio.bfcspace.com/index.php?p=le_stelle&num=103)
9. "Il mistero delle tempeste solari", **Bemporad A.**, Darwin, vol. 34, pp. 38-45, 2009.  
[https://www.researchgate.net/publication/230736262\\_Il\\_mistero\\_delle\\_tempeste\\_solarl](https://www.researchgate.net/publication/230736262_Il_mistero_delle_tempeste_solarl)
10. "C'è qualcosa che non va sul Sole? - un'inchiesta sull'affidabilità della nostra stella come stabile fonte di energia (PARTE II)", Andretta V., **Bemporad A.**, Berrilli F., Cauzzi G., Elidoro C., Gianpapa M., Hathaway D.H., Messerotti M., Oliviero M., Pasachoff J.M., Ramelli R., Zuccarello F., Coelum, vol. 124, pp. 28-39, 2009.
11. "C'è qualcosa che non va sul Sole? - un'inchiesta sull'affidabilità della nostra stella come stabile fonte di energia (PARTE I)", Andretta V., **Bemporad A.**, Berrilli F., Cauzzi G., Elidoro C., Hathaway D.H., Oliviero M., Pasachoff J.M., Ramelli R., Zuccarello F., Coelum, vol. 123, pp. 26-40, 2008.