

Publications – Marco Velli

Papers in refereed journals

- 1) Velli, M. and Hood, A.W., (1986) Solar Phys. 106, 353 “Resistive Ballooning Modes in Line-tied Coronal Fields: I. Arcades.”
- 2) Velli, M. and Hood, A.W., (1987) Solar Phys. 109, 351 “Resistive Ballooning Modes in Line-tied Coronal Fields: II. Loops.”
- 3) Velli, M. and Hood, A.W., (1989) Solar Phys. 119, 107 “Resistive Tearing in Line-tied Magnetic Fields: Slab Geometry.”
- 4) Velli, M., Grappin, R. and Mangeney, A., (1989) Phys. Rev. Letts. 63, 1807, “Turbulent Cascade of Incompressible, Unidirectional Alfvén Waves in the Interplanetary Medium”
- 5) Velli, M., Einaudi, G. and Hood, A.W., (1990) Astrophys. Journal 350, 418, “Boundary Effects on the MHD Stability of a Resistive Plasma”
- 6) Velli, M., Einaudi, G. and Hood, A.W., (1990) Astrophys. Journal 350, 428, “Ideal Kink Instabilities in Line-tied Coronal Loops: Growth Rates and Geometrical Properties”
- 7) Velli, M., Grappin, R. and Mangeney, A., (1990) Comp. Phys. Communications 59, 153 “Solar Wind Expansion Effects on the Evolution of Hydromagnetic Turbulence in the Interplanetary Medium”
- 8) DeBruyne, P., Velli, M., and Hood, A.W., (1990) Comp. Phys. Communications 59, 55 “The Ideal MHD Stability of Line-Tied Coronal Loops: a Truncated Fourier Series Approach”
- 9) Grappin, R., Velli, M. and Mangeney, A., (1991) Annales Geophysicae 9, 416 “Alfvénic Versus Standard Turbulence in the Solar Wind”
- 10) Velli, M., Grappin, R. and Mangeney, A., (1992) Geophys. Astrophys. Fluid Dyn., 62, 101 “Waves From the Sun?”
- 11) Velli, M., (1993) Astronomy & Astrophys., 270, 304 “On the Propagation of Ideal, Linear Alfvén Waves in Radially Stratified Stellar Atmospheres and Winds”
- 12) Grappin, R., Velli, M. and Mangeney, A., (1993) Phys. Rev. Letts., 70, 2190, “Nonlinear Wave Evolution in the Expanding Solar Wind”
- 13) Velli, M. and Grappin, R. (1993) Adv. Space Res., 13, (9)49, “Properties of the Solar Wind”
- 14) Velli, M. (1994) Adv. Space Res., 14, (4)123, “Alfvén Waves in the Solar Corona and Solar Wind”
- 15) Einaudi, G. and Velli, M. (1994) Space Science Revs., 68, 97, “Nanoflares and current sheet dissipation”

- 16) Velli, M. (1994) *Astrophys. Journal Letts.*, 432, L55, "From supersonic winds to accretion: comments on the stability of stellar winds and related flows"
- 17) Velli, M, Habbal, S.R. and Esser R. (1994) *Space Science Revs.*, 70, 391, "Coronal plumes and fine scale structure in high-speed solar wind streams"
- 18) Grappin, R. and Velli, M. (1996) *Journ. Geophys. Res.*, 101, 425, "Waves and streams in the expanding solar wind"
- 19) Einaudi, G., Velli, M. Politano, H and Pouquet A. (1996) *Astrophys. Journal Letts.*, 457, L113 "Energy release in a turbulent corona"
- 20) Velli, M. and Malara, F. (1996) *Phys.ofPlasmas*, 3, 4427, "Parametric instability of a large amplitude non-monochromatic Alfvén wave"
- 21) Grappin, R., Cavillier, E. and Velli, M. (1997) *Astron. & Astrophys.*, 322, 659, "Propagation of acoustic waves in isothermal winds in the vicinity of the sonic point"
- 22) Velli, M., Lionello, R. and Einaudi, G. (1997) *Solar Phys.*, 172, 257, "Kink modes and current sheets in coronal loops"
- 23) Einaudi, G., Lionello, R. and Velli, M. (1997) *Adv. Space Res.*, 19, 1875, "Magnetic reconnection in solar coronal loops"
- 24) Parenti, S., Velli, M., Poletto, G., Suess, S.T. and McComas, D.J., (1997), *Solar Phys.* 174, 329, "Magnetic flux tubes at 3 AU?"
- 25) Georgoulis, M.K., Velli, M. and Einaudi, G.,(1998) *Astrophys. Jour.*, 497, 957, "Statistical Properties of Magnetic Activity in the Solar Corona"
- 26) Lionello, R., Velli, M., Einaudi, G. and Mikic, Z., (1998), *Astrophys. Jour.*, 494, 840, "Non Linear MHD Evolution of Line-tied Coronal Loops"
- 27) Del Zanna, L., Velli, M. and Londrillo, P., (1998) *Astron. & Astrophys.*, 330, L13, "Dynamical response of a stellar atmosphere to pressure perturbations: numerical simulations"
- 28) Velli, M. and Pruneti, F., (1997), *Plasma Phys. and Controlled Fusion*, 39, B317, "Alfvén waves in the solar corona and solar wind"
- 29) Baty, H., Einaudi, G., Lionello, R. and Velli, M. (1998), *Astron. & Astrophys.*, 333, 313, "Ideal kink instabilities in line-tied coronal loops"
- 30) Lionello, R., Schnack, D.D., Einaudi, G. and Velli, M. (1998), *Phys. Plasmas*, 5, 3722, "Current sheet formation due to nonlinear kink modes in periodic and line-tied configurations"
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- 34) Velli, M., and Liewer, P.C. (1999), Space Science Revs. 87, 339, “Alfvén Wave Generation in Photospheric Vortex Filaments Macrospicules and Solar Tornadoes”
- 35) G. Einaudi, M. Velli (1999), Phys. Plasmas, 6, 4146, “The Distribution of Flares, Statistics of Magnetohydrodynamic Turbulence and Coronal Heating”,
- 36) Aletti, V., Velli, M., Bocchialini, K., Einaudi, G., Georgoulis, M., Vial, J.-C. (2000) Astrophys. Jour., 544, 550, “Microscale Structures on the Quiet Sun and Coronal Heating”
- 37) Buti, B., Velli, M., Liewer, P., Goldstein, B.E., and Hada, T.: (2000) Phys. Plasmas, 7, 3998 “Hybrid Simulations of the collapse of Alfvénic wave packets”
- 38) Liewer, P.C., Velli, M., Goldstein, B. E. (2001), J. Geophys. Res., 106, A12, 29261, “Alfvén wave propagation and ion cyclotron interactions in the expanding solar wind: One-dimensional hybrid simulations”
- 39) Del Zanna, L., Velli, M. and Londrillo, P. (2001) Astron. & Astrophys. 367, 705, “Parametric decay of circularly polarized Alfvén waves: Multidimensional simulations in periodic and open domains”
- 40) Einaudi, G., Chibbaro, S. Dahlburg, S. and Velli, M. (2001), Astrophys. Jour. 547, 1167, “Plasmoid formation and acceleration in the solar streamer belt”
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47) Del Zanna, L.; Schaekens, E.; Velli, M. (2005) *Astron.&Astrophys*, 1095-1104 "Transverse oscillations in solar coronal loops induced by propagating Alfvénic pulses"

48) Landi, S; Velli, M., Einaudi, G., (2005) *AstrophysJ*, 392-401, "Alfvén Waves and Shock Wave Formation at an X-Point Magnetic Field Configuration"

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