
COMPLETE PUBLICATION LIST OF SAVITA MATHUR (20 OCTOBER 2015)

REFEREED PUBLICATIONS

2015

1. S. Pires, **S. Mathur**, R. A. García, et al.
Gap interpolation by inpainting methods : Application to Ground and Space-based Asteroseismic data,
A&A, 574, 18
2. J. Tayar, T. Ceillier, D. A. García-Hernandez, N. W. Troup, **S. Mathur**, et al.
Rapid Rotation of Low-mass Red Giants Using APOKASC: A Measure of Interaction Rates on the Post-main-sequence,
ApJ, 807, 82
3. J. van Saders, T. Ceillier, T. S. Metcalfe, ..., **S. Mathur**, et al.
Faulty Clocks and Failing Fields: Anomalous Stellar Rotation in Old Field Stars,
Nature, in press
4. A. Jimenez, R. A. García, F. Perez Hernandez, **S. Mathur**
Analysis of the acoustic cut-off frequency and HIPs in six Kepler stars with stochastically excited pulsations,
A&A, in press
5. C. Chiappini, F. Anders, T. S. Rodriguez, ..., **S. Mathur**, et al.
Young ??/Fe-enhanced stars discovered by CoRoT and APOGEE: What is their origin?,
A&A, 576, 12
6. W. J. Chaplin, M. N. Lund, R. Handberg, ..., **S. Mathur**, et al.
Asteroseismology of solar-type stars with K2,
PNAS, in press
7. M. Martig, R. Hans-Walter, V. Silva Aguirre, ..., **S. Mathur**, et al.
Young ??-enriched giant stars in the solar neighbourhood,
MNRAS, 451, 2230
8. D. Stello, D. Huber, S. Sharma, ..., **S. Mathur**, et al.
Oscillating Red Giants Observed during Campaign 1 of the Kepler K2 Mission: New Prospects for Galactic Archaeology,
ApJ, 809, 3
9. S. Alam, F. D. Albareti, C. Allende Prieto, ..., **S. Mathur**, et al.
The Eleventh and Twelfth Data Releases of the Sloan Digital Sky Survey: Final Data from SDSS-III,
ApJS, 219, 12

10. S. Mathur, R.A. García, J. Ballot, T. Ceillier, T. S. Metcalfe, C. Regulo, D. Salabert, A. Jimenez, S. Bloemen
Magnetic activity of F stars characterized by seismology,
A&A, 562, 124
11. S. Mathur, D. Salabert, R. A. García, and T. Ceillier
Studying surface magnetic activity with Kepler photometric data,
Journal of Space Weather and Space Climate, 4, 15
12. J. Dias do Nascimento, R.A. García, S. Mathur, F. Anthony, W. J. Chaplin et al.
Rotation of solar analogs and twins candidates revealed by the Kepler mission,
ApJL, 790, 23
13. R. A. García, T. Ceillier, D. Salabert, S. Mathur, et al.
Surface rotation of solar-like pulsating stars observed with Kepler: Towards asteroseismically calibrated age-rotation-activity relations for Kepler solar-like stars,
A&A, 752, 34
14. R. A. García, S. Mathur, S. Pires, et al.
Impact on asteroseismic analyses of regular gaps in Kepler data,
A&A, 568, 10
15. H. Rauer, C. Catala, C. Aerts, ..., S. Mathur, et al.
The PLATO 2.0 Mission,
Experimental Astronomy, 38, 259
16. T. S. Metcalfe, O. L. Creevey, G. Dogan, S. Mathur, et al.
Properties of 42 Solar-type Kepler targets from the Asteroseismic Modeling Portal,
ApJS, 214, 27
17. T. Kallinger, J. De Ridder, S. Hekker, S. Mathur, et al.
The connection between stellar granulation and oscillation as seen by the Kepler mission,
A&A, 570, 41
18. D. Stello, D. Compton, T. R. Bedding, ..., S. Mathur, et al.
Non-radial Oscillations in M-giant Semi-regular Variables: Stellar Models and Kepler Observations,
ApJ, 788, 10
19. M. H. Pinsonneault, T. Elsworth, C. Epstein, ..., S. Mathur et al.
The APOKASC Catalog: An Asteroseismic and Spectroscopic Joint Survey of Targets in the Kepler Fields,
ApJS, 215, 19)
20. T. Rodrigues, L. Girardi, A. Miglio, ..., S. Mathur et al.
Bayesian distances and extinctions for giants observed by Kepler and APOGEE,
MNRAS, 445, 2758
21. R. A. García, F. Pérez Hernandez, O. Benomar, ..., S. Mathur et al.
Study of KIC 8561221 observed by Kepler: an early red giant showing depressed dipolar modes,
A&A, 563, 84
22. P. G. Beck, K. Hambleton, J. Vos, ..., S. Mathur et al.
Pulsating red giant stars in eccentric binary systems discovered from Kepler space-based photometry: A sample study and the analysis of KIC 5006817,
A&A, 564, 36
23. A. Mazumdar, M.J.P.F.G Monteiro, J. Ballot, H.M. Antia, S. Basu, G. Houdek, S. Mathur et al.
Measurement of acoustic glitches in solar-type stars from oscillation frequencies observed by Kepler,
ApJ, 782, 18)
24. A. Raja Bayanna, B. Kumar, P. Venkatkrishnan, S. Matthews, B. Ravindra, S. Mathur and R. A. García
On the line profile changes observed during the X2.2 class flare in the active region NOAA 11158,
RAA, 14, 207
25. W. J. Chaplin, S. Basu, D. Huber..., S. Mathur et al.
Asteroseismic fundamental properties of solar-type stars observed by the NASA Kepler Mission,
ApJS, 210, 1
26. D. Huber, J. Matthews, A. H. Pinsonneault, ..., S. Mathur, et al.
Revised stellar properties of Kepler targets for the quarter 1-16 transit detection run,
ApJS, 211, 2
27. P. Boumier, O. Benomar, F. Baudin, ..., S. Mathur et al.
Seismic analysis of HD 43587Aa, a solar-like oscillator in a quadruple system,
A&A, 564, 34
28. C. Epstein, J. Johnsons, B. Mosser, ..., S. Mathur et al.
Testing the Asteroseismic Mass Scale Using Metal-Poor Stars Characterized with APOGEE and Kepler,
ApJ, 785, 28

2013

29. S. Mathur, R. A. García, A. Morgenthaler, D. Salabert, P. Petit, J. Ballot, C. Régulo, and C. Catala
Constraining magnetic-activity modulation in 3 solar-like stars observed by CoRoT and NARVAL,
A&A, 2013, 550, 32
30. S. Mathur, H. Bruntt, C. Catala, et al.
Study of HD 169392A observed by CoRoT and HARPS,
A&A, 549, 12
31. T. Metcalfe, A. Buccino, A. Brown, S. Mathur, D. Soderblom, T. Henry, P. Mauas, R. Petrucci, J. Hall and S. Basu
Magnetic Activity Cycles in the Exoplanet Host Star epsilon Eridani,
ApJL, 763, 26
32. G. Dogan, T. S. Metcalfe, S. Deheuvels, ..., S. Mathur et al.
Characterizing two solar-type Kepler subgiants with asteroseismology: KIC 10920273 and KIC 11395018,
ApJ, 763, 49
33. L. Gizon, J. Ballot, S. Vauclair, ..., S. Mathur et al.
Seismic constraints on rotation of Sun-like star and mass of exoplanet,
PNAS, 110, 13267
34. N. Ozel, B. Mosser, A.-A. Dupret, ..., S. Mathur et al.
Differential asteroseismic study of seismic twins observed by CoRoT. Comparison of HD 175272 with HD 181420,
A&A, 558, 79
35. R. Samadi, K. Belkacem, H.-G. Ludwig, ..., S. Mathur et al.
Stellar granulation as seen in disk-integrated intensity II. Theoretical scaling relations compared with observations,
A&A, 559, 40
36. B. Mosser, W.A. Dziembowski, K. Belkacem, ..., S. Mathur et al.
Period-luminosity relations in evolved red giants explained by solar-like oscillations,
A&A, 559, 137

2012

37. S. Mathur, T. S. Metcalfe, M. Woitazeck et al.
A uniform asteroseismic analysis of 22 solar-type stars observed by Kepler,
ApJ, 2012, 749, 152
38. B. Mosser, Y. Elsworth, S. Hekker, D. Huber, T. Kallinger, S. Mathur, et al.
Characterization with Kepler of the power excess of solar-like oscillations in red giants,
A&A, 2012, 537, 30
39. O. L. Creevey, D. Stello, A. Frasca, ..., S. Mathur et al.
Strong stellar constraints using solar-like oscillations from eight months of Kepler observations,
ApJ, 2012, 537, 111
40. S. Turck-Chièze, R. A. García, I. Lopes, J. Ballot, S. Couvidat, L. Piau, S. Mathur, D. Salabert and J. Silk
First study of dark matter properties with detected solar gravity modes and neutrinos,
ApJL, 2012, 746, 12
41. S. B. Howell, J. F. Rowe, S. T. Bryson, ..., S. Mathur et al.
Kepler-21b: A 1.6R Earth Planet Transiting the Bright Oscillating F Subgiant Star HD 179070,
ApJ, 2012, 746, 123
42. T. S. Metcalfe, T. Appourchaux, W. J. Chaplin, ..., S. Mathur et al.
Asteroseismology of the solar analogs 16Cyg A and B from Kepler observations,
ApJL, 2012, 748, 10
43. M.-E. Escobar, S. Théado, S. Vauclair, ..., S. Mathur et al.
Precise Modeling of the Exoplanet Host Star and CoRoT Main Target HD 52265,
A&A, 543, 96
44. E. Corsaro, D. Stello, D. Huber, ..., S. Mathur et al.
Asteroseismology of the open clusters NGC 6791, NGC 6811, and NGC 6819 from nineteen months of Kepler photometry,
ApJ, 757, 190
45. A. Bonaca, S. Basu, ..., S. Mathur et al.
An Asteroseismic Calibration of Convection in Stars,
ApJ, 755, 12
46. S. Deheuvels, R. A. García, W. J. Chaplin, ..., S. Mathur et al.
Seismic evidence for a fast rotating core in a lower-giant-branch star observed with Kepler,
ApJ, 756, 19
47. A.-M. Broomhall, D. Salabert, W. J. Chaplin, R. A. García, Y. Elsworth, R. Howe and S. Mathur
Misleading variations in estimated rotational frequency splittings of solar p modes: Consequences for helio- and asteroseismology,
MNRAS, 2012, 422, 3564

48. H. Bruntt, S. Basu, B. Smalley, ..., **S. Mathur** et al.
Accurate fundamental parameters and detailed abundance patterns from spectroscopy of 93 solar-type Kepler targets,
MNRAS, 423, 122
49. Silva-Aguirre, V., Casagrande, L., Basu, S.,..., **S. Mathur** et al.
Verifying Asteroseismically Determined Parameters of Kepler Stars Using Hipparcos Parallaxes: Self-consistent Stellar Properties and Distances,
ApJ, 757, 99
50. Mosser, B., Goupil, M.J., Belkacem, K.,..., **S. Mathur** et al.
Spin down of the core rotation in red giants,
A&A, 548, 10
51. T. Appourchaux, W. J. Chaplin, M. Gruberbauer, ..., **S. Mathur** et al.
Oscillation mode frequencies of 61 main-sequence and subgiant stars observed by Kepler,
A&A, 543, 54
- 2011
52. **S. Mathur**, R. Handberg, T. L. Campante et al.
Solar-like oscillations in KIC 11395018 and KIC 11234888 from 8 months of Kepler data,
ApJ, 2011, 733, 95
53. **S. Mathur**, S. Hekker, R. Trampedach, A. Jiménez, D. Buzasi, D. Huber, T. Kallinger, J. Ballot, et al.
Granulation in Red Giants: observations by the Kepler mission and 3D convection simulations,
ApJ, 2011, 741, 119
54. T. L. Campante, R. Handberg, **S. Mathur** et al.
Asteroseismology from the Kepler ten-month time series: the evolved Sun-like stars KIC 10273246 and KIC 10920273,
A&A, 2011, 534, 6
55. B. Kumar, P. Venkatakrishnan, **S. Mathur** , S. Tiwari and R. A. García
On the flare induced seismicity in the active region NOAA 10930 and related enhancement of global waves in the Sun,
ApJ, 2011, 743, 29
56. D. Huber, T. R. Bedding, D. Stello, S. Hekker, **S. Mathur**, et al.
Testing asteroseismic scaling relations using Kepler long-cadence and short-cadence data,
ApJ, 2011, 743, 143
57. S. Hekker, S. Basu, F. Grundahl, D. Stello, T. Kallinger, **S. Mathur**, R. A. García, B. Mosser, D. Huber, T. R. Bedding, R. Szabo, J. De Ridder, W. J. Chaplin, T. Elsworth, and S. J. Hale
Asteroseismic inferences on red giants in open clusters NGC 6791, NGC 6819 and NGC 6811 using Kepler,
A&A, 2011, 530, 100
58. S. Hekker, Y. Elsworth, J. De Ridder, B. Mosser, R.A. García, T. Kallinger, **S. Mathur** et al.
Solar-like oscillations in red giants observed with Kepler: comparison of global oscillation parameters from different methods,
A&A, 2011, 525, 131
59. S. Basu, F. Grundahl, D. Stello, T. Kallinger, S. Hekker, B. Mosser, R. A. García, **S. Mathur**, K. F. Brogaard, H. Bruntt, W. J. Chaplin, N. Gai, Y. Elsworth, et al.
Sounding open clusters: asteroseismic constraints from Kepler on the properties of NGC 6791 and NGC 6819,
ApJL, 2011, 729, 10
60. J. Ballot, L. Gizon, R. Samadi, G. Vauclair, O. Benomar, H. Bruntt, T. Stahn, G.A. Verner, T.L. Campante, R.A. García, **S. Mathur**, B. Mosser, D. Salabert et al.
Accurate p-mode measurements in the GOV metal-rich CoRoT target HD 52265,
A&A, 2011, 530, 97
61. P. Beck, T. Bedding, ..., **S. Mathur** et al.
Detection of gravity-mode period spacings in red giant stars by the Kepler Mission,
Science, 2011, 332, 205
62. T. Bedding, P. Beck, B. Mosser, ..., **S. Mathur** et al.
Distinguishing between hydrogen- and helium-burning red giant stars with asteroseismology using gravity-mode period spacings,
Nature, 2011, 471, 608
63. G. Verner, Y. Elsworth, W. J. Chaplin, T.L. Campante, E. Corsaro, P. Gaulme, S. Hekker, D. Huber, C. Karoff, **S. Mathur**, B. Mosser, T. Apourchaux, et al.
Global asteroseismic properties of solar-like oscillations observed by Kepler: Comparison of nine analysis methods,
MNRAS, 2011, 415, 3539
64. W. J. Chaplin, S. Basu, A. Miglio, ..., **S. Mathur** et al.
Ensemble asteroseismology of solar-type stars with the NASA Kepler Mission ,
Science, 2011, 332, 216

65. W. J. Chaplin, H. Kjeldsen, T. R. Bedding, ..., **S. Mathur** et al.
Predicting the detectability of oscillations in solar-type stars observed by Kepler,
ApJ, 2011, 732, 54
66. G. Verner, W. J. Chaplin, S. Basu, ..., **S. Mathur** et al.
Verification of the Kepler Input Catalog from asteroseismology of solar-type stars,
ApJL, 2011, 738, 28
67. W. J. Chaplin, T. R. Bedding, A. Bonanno, ..., **S. Mathur** et al.
The impact of stellar activity on the detectability of solar-like oscillations observed by Kepler,
ApJ, 2011, 732, 5
68. T. R. White, T. R. Bedding, B. Mosser, ..., **S. Mathur**, et al.
Asteroseismic diagrams from a survey of 500 solar-type stars: early results from Kepler,
ApJL, 2011, 742, 3
69. V. Silva Aguirre, W. J. Chaplin, J. Ballot, S. Basu, ..., **S. Mathur**, et al.
Constructing a one-solar mass evolutionary sequence using asteroseismic data from Kepler,
ApJL, 740, 2
70. D. Stello, ..., **S. Mathur**, et al.
An asteroseismic membership study of three open clusters in the Kepler field: NGC 6791, NGC 6819, and NGC 6811,
ApJ, 2011, 739, 13
71. D. Stello, ..., **S. Mathur**, et al.
Amplitude of solar-like oscillations: constraints from the red giants in open clusters observed by Kepler,
ApJ, 2011, 737, 10
72. R. A. García, S. Hekker, D. Stello, J. Gutierrez-Soto, ..., **S. Mathur** et al.
Preparation of Kepler lightcurves for asteroseismic analyses,
MNRAS, 2011, 414, 6
73. D. Salabert, C. Régulo, R. A. García, J. Ballot and **S. Mathur**
Activity cycle frequency shifts in the solar-like oscillation star HD49933,
A&A, 2011, 530, 127
- 2010
74. **S. Mathur**, R. A. García, C. Régulo, O. L. Creevey, J. Ballot, D. Salabert, T. Arentoft, P.-O. Quirion, W. J. Chaplin and H. Kjeldsen
Determining global parameters of the oscillations of solar-like stars,
A&A, 2010, 511, 46
75. **S. Mathur**, R. A. García, C. Catala et al.
HD170987: a solar-like oscillating CoRoT target revealed by spectroscopy and seismic observations,
A&A, 2010, 518, 53
76. R. A. García, **S. Mathur**, D. Salabert, J. Ballot, C. Régulo, T. S. Metcalfe and A. Baglin
CoRoT reveals a magnetic activity cycle in a Sun-like star,
Science, 2010, 329, 1032
77. B. Kumar, **S. Mathur** and R. A. García
On the flare induced high-frequency global waves in the Sun,
ApJL, 2010, 711, 12
78. A. Moya, **S. Mathur** and R. A. García
Sensitivity of the g-mode frequencies to pulsation codes and their parameters,
Solar Physics, 2010, 77
79. D. Huber, T.R. Bedding, D. Stello, B. Mosser, **S. Mathur** et al.
Asteroseismology of red giants from the first four months of Kepler data: global oscillation parameters for 800 stars,
ApJ, 2010, 723, 1607
80. T. Kallinger, B. Mosser, S. Hekker, D. Huber, D. Stello, **S. Mathur** et al.
Asteroseismology of red giants from the first four months of Kepler data: Fundamental stellar parameters,
A&A, 2010, 522, 1
81. T. S. Metcalfe, S. Basu, T.J. Henry, D.R. Soberblom, P. J. Judge, M. Knolker, **S. Mathur** and M. Rempel
Discovery of a 1.6-year magnetic activity cycle in the exoplanet host star i Horologii,
ApJL, 2010, 723, 213
82. S. Deheuvels, H. Bruntt, E. Michel, C. Barban, G. Verner, C. Régulo, B. Mosser, **S. Mathur**, P. Gaulme, R. A. García, P. Boumier, T. Appourchaux, R. Samadi, C. Catala, F. Baudin, A. Baglin and M. Auvergne
Seismic and spectroscopic characterization of the solar-like pulsating CoRoT target HD 49385,
A&A, 2010, 515, 87
83. W. J. Chaplin, T. Appourchaux, Y. Elsworth, ..., **S. Mathur** et al.
The asteroseismic potential of Kepler: first results for solar-type stars,
ApJL, 2010, 713, 171

84. T. Bedding, D. Huber, D. Stello, Y. Elsworth, Y. Hekker, T. Kallinger, **S. Mathur** et al.
Solar-like oscillations in low-luminosity red giants: first results from Kepler,
ApJL, 2010, 713, 176
85. D. Stello, S. Basu, H. Bruntt, ..., **S. Mathur** et al.
Detection of solar-like oscillations from Kepler photometry of the open Cluster NGC 6819,
ApJL, 2010, 713, 182
86. T. S. Metcalfe, M. J. P. F. G. Monteiro, M. J. Thompson, ..., **S. Mathur** et al.
A precise asteroseismic age and radius for the evolved sun-like star KIC 11026764,
ApJ, 2010, 723, 1583
- 2009
87. R. A. García, C. Réguo, R. Samadi, J. Ballot, C. Barban, O. Benomar, W.J. Chaplin, P. Gaulme, T. Appourchaux, **S. Mathur**, B. Mosser, T. Toutain, G. A. Verner, M. Auvergne, A. Baglin, F. Baudin, P. Boumier, H. Bruntt, C. Catala, S. Deheuvels, Y. Elsworth, S. J. Jiménez-Reyes, E. Michel, F. Pérez Hernández, I. W. Roxburgh and D. Salabert
Solar-like oscillations with low observed amplitude in the CoRoT target HD 181906,
A&A, 2009, 506, 41
88. O. Benomar, F. Baudin, T. Campante, W. J. Chaplin, T. Toutain, G. Verner, T. Appouchaux, J. Ballot, C. Barban, Y. Elsworth, R. A. García, P. Gaulme, **S. Mathur**, B. Mosser, C. Réguo, I. Roxburgh, M. Auvergne, A. Baglin, C. Catala and R. Samadi
On the spectrum of the acoustic oscillations of HD49933,
Letter to the editor A&A, 2009, 507, 13
89. C. Barban, S. Deheuvels, F. Baudin, T. Appourchaux, M. Auvergne, J. Ballot, P. Boumier, W. J. Chaplin, R. A. García, P. Gaulme, E. Michel, B. Mosser, C. Réguo, I.W. Roxburgh, G. Verner, A. Baglin, C. Catala, R. Samadi, H. Bruntt, Y. Elsworth and **S. Mathur**
Solar-like oscillations in HD 181420: data analysis of 156 days of CoRoT data,
A&A, 2009, 506, 51
90. B. Mosser, I. Roxburgh, E. Michel, T. Appourchaux, C. Barban, F. Baudin, P. Boumier, H. Bruntt, C. Catala, S. Deheuvels, R. A. García, P. Gaulme, C. Réguo, R. Samadi, G. Verner, M. Auvergne, A. Baglin, J. Ballot, O. Benomar and **S. Mathur**
CoRoT sounds the stars: HD 175726, a simultaneously active and passive star,
A&A, 2009, 506, 33
- 2008
91. **S. Mathur**, A. Eff-Darwich, R. A. García and S. Turck-Chièze
Sensitivity of helioseismic gravity modes to the dynamics of the solar core,
A&A, 2008, 484, 517
92. R. A. García, **S. Mathur** and J. Ballot
Can we constrain the solar interior physics studying the gravity-mode asymptotic signature?,
Solar Physics, 2008, 251, 135
93. R. A. García, **S. Mathur**, J. Ballot, A. Eff-Darwich, S. J. Jiménez-Reyes and S. G. Korzennik
Influence of low-degree high-order p-mode splittings on the solar rotation profile,
Solar Physics, 2008, 251, 119
94. S. Lefebvre, S. J. Jiménez-Reyes, R. A. García, S. Turck-Chièze and **S. Mathur**
Variations of the solar granulation motions with height using the GOLF/SoHO experiment,
A&A, 2008, 490, 1143
- 2007
95. **S. Mathur**, S. Turck-Chièze, S. Couvidat and R. A. García
On the characteristics of solar gravity-mode frequencies,
ApJ, 2007, 668, 594
96. R. A. García, S. Turck-Chièze, S. J. Jiménez-Reyes, J. Ballot, P. L.Pallé, A. Eff-Darwich, **S. Mathur**, J. Provost
Tracking solar gravity modes: the dynamics of the solar core,
Science, 2007, 316, 1591

REFEREED CONFERENCE PROCEEDINGS

2013

1. R.A. García, D. Salabert, **S. Mathur**, et al.
Towards solar activity maximum 24 as seen by GOLF and VIRGO/SPM instruments,
2013, JPhCS, 440, 2020, Proceedings of the GONG 2012 / LWS/SDO-5 / SOHO 27 meeting
2. R.A. García, G. Davies, A. Jimenez, ..., **S. Mathur**, et al.
The Sun-as-a-star observations: GOLF and VIRGO on SoHO, and BiSON network,
2013, JPhCS, 440, 2040 Proceedings of the GONG 2012 / LWS/SDO-5 / SOHO 27 meeting
3. C. Barban, S. Deheuvels, M.J. Goupil, T. Lebreton, **S. Mathur**, et al.
Solar-like oscillations in distant stars as seen by CoRoT: the special case of HD 42618, a solar sister,
2013, JPhCS, 440, 2030, Proceedings of the GONG 2012 / LWS/SDO-5 / SOHO 27 meeting

2012

4. A. Mazumdar, M.J.P.F.G. Monteiro, J. Ballot, H.M. Antia, S. Basu, G. Houdek, **S. Mathur**, et al.
Acoustic glitches in solar-type stars from Kepler,
2012, AN, 330, 1040

2011

5. **S. Mathur**, R.A. García, D. Salabert, C. Régulo, J. Ballot , T. Metcalfe and A. Baglin
Unveiling stellar magnetic activity using CoRoT seismic observations,
2011, Journal of Physics Conferences, Aix-en-Provence, France, 271, 2045
6. B. Kumar, P. Venkatkrishnan, **S. Mathur**, S. K. Tiwari and R.A. García
Analysis of peculiar penumbral flows observed in the active region NOAA 10930 during a major solar flare,
2011, Journal of Physics Conferences, Aix-en-Provence (France), 271, 2020
7. H. Vásquez Ramió, **S. Mathur**, C. Régulo and R.A. García
Effect of line-of-sight inclinations on the observation of solar activity cycle: Lessons for CoRoT & Kepler,
2011, Journal of Physics Conferences, Aix-en-Provence (France), 271, 2056
8. R.A. García, D. Salabert, J. Ballot, K. H. Sato, **S. Mathur**, and A. Jiménez
The acoustic low-degree modes of the Sun measured with 14 years of continuous GOLF and VIRGO measurements,
2011, Journal of Physics Conferences, Aix-en-Provence (France), 271, 2049
9. R.A. García, D. Salabert, J. Ballot, A. Eff-Darwich, R. Garrido, A. Jiménez, S. Mathis, **S. Mathur**, A. Moya, P. L. Palle, C. Regulo, K. H. Sato, J. C. Suarez and S. Turck-Chièze
New insights on the solar core,
2011, Journal of Physics Conferences, Aix-en-Provence (France), 271, 2046

2010

10. D. Stello, S. Basu, T. R. Bedding, ... **S. Mathur** et al.
Solar-like oscillations in cluster stars,
2010, AN, Proceedings of the Fourth HELAS International Conference, Lanzarote (Spain), 331, 972
11. C. Karoff , W. J. Chaplin, T. Appourchaux, ... **S. Mathur** et al.
Asteroseismology of Solar-type stars with Kepler I: Data Analysis,
2010, AN, Proceedings of the Fourth HELAS International Conference, Lanzarote (Spain), 331, 985

2009

12. **S. Mathur**, R. A. García and A. Eff-Darwich
Improving our knowledge on the dynamics of the solar core: low-degree high-frequency p modes and g modes,
ASSP, 2009, Ed. Hasan & Rutten, p326
13. S. Turck-Chièze, A. S Brun, R. A. García, S. J. Jiménez-Reyes, P. Pallé, D. Salabert, J. Ballot and **S. Mathur**
Towards a complete view of the solar internal magnetism,
ASSP, 2009, Ed. Hasan & Rutten, p330

2008

14. S. Turck-Chièze, **S. Mathur**, J. Ballot, R. A. García, P.-H. Carton, J.-C. Barrière, P. Daniel-Thomas, A. Delbart, D. Desforges, R. Granelli, F. Nunio, Y. Piret, D. Loiseau, P.L. Pallé, A.J. Jiménez, S.J. Jiménez-Reyes and R. Simoniello
The GOLF-NG prototype and the solar European perspective for cosmic vision 2015-2025,
Journal of Physics, Conference series, 2008, 118, 2044
15. R. A. García, A. Jiménez, **S. Mathur**, J. Ballot, A. Eff-Darwich, S. J. Jiménez-Reyes J. Provost and S. Turck-Chièze
Update on g-mode research,
Astronomische Nachrichten, 2008, 329, 476

- 16.** S. Turck-Chièze, P.-H. Carton, **S. Mathur**, J.-C. Barrière, C. Lahonde-Hamdoun, R. Granelli, D. Loiseau, F. Nunio, Y. Piret and J. M. Robillot
Laboratory performances of the solar multichannel resonant scattering spectrometer prototype of the GOLF-New Generation instrument,
Astronomische Nachrichten, 2008, 329, 521
- 2006
- 17.** S. Turck-Chièze, P.H. Carton, J. Ballot, J.C. Barrière, D-T Philippe, A. Delbart, D. Desforges, R.A García, R. Granelli, **S. Mathur**, F. Nunio, Y. Piret, P.L. Pallé, A.J. Jiménez, S.J. Jiménez-Reyes, J.M. Robillot, E. Fossat, A.M. Eff-Darwich, B. Gelly
GOLF-NG spectrometer, a space prototype for studying the dynamics of the deep solar interior,
Advances in Space Research, 2006, v38, 1812

BOOK CHAPTER

2015

- 1.** **S. Mathur**, J. Ballot, R.A. García
Stellar dynamics: rotation, convection and magnetic fields,
'Extraterrestrial Seismology', Cambridge press, Eds V.C.H Tong & R.A. García, 2015, 294-305

PROCEEDINGS

2004

1. S. Turck-Chièze, R. A. García, S. Couvidat, J. Ballot, S. J. Jiménez-Reyes, E. Fossat, B. Gelly, **S. Mathur**, P. A. P. Nghiem, P. L. Pallé et al.
Gravity Modes with a Resonant Scattering Spectrophotometer,
2004, SOHO14, Yale, USA
2. R.A. García, S. J. Jiménez-Reyes, S. Turck-Chièze and **S. Mathur**
Helioseismology from the Blue and Red Wings of the Na profile as seen by GOLF,
2004, SOHO14, Yale, USA
3. R.A. García, S. Turck-Chièze, J. Ballot, S. Couvidat, A. Eff-Darwich, S. J. Jiménez-Reyes, **S. Mathur**, P. L. Pallé and the GOLF-NG team
The solar radiative interior: gravity modes and future instrumentation,
2004, SF2A, Paris, FRANCE

2005

4. S. Turck-Chièze, **S. Mathur**, P.H. Carton, R.A. García, P. L. Pallé, J. Ballot and the GOLF-NG team
GOLF New Generation: a spectrophotometer for the quest of solar gravity modes,
2005, SF2A, Strasbourg, FRANCE

2006

5. S. Turck-Chièze, W. Schmutz, G. Thuillier, ..., **S. Mathur** et al.
The Dynamics Project,
2006, ESA SP-617: Proceedings of SOHO 17
6. S. Turck-Chièze, W. Schmutz, G. Thuillier, ..., **S. Mathur** et al.
Scientific Objectives of the Novel Formation Flying Mission Aspiics,
2006, ESA SP-617: Proceedings of SOHO 17
7. S. Turck-Chièze W. Schmutz, G. Thuillier, ..., **S. Mathur** et al.
The EUV Variability Experiment (EVE) on the Solar Dynamics Observatory (SDO): Science Plan and Instrument Overview,
2006, ESA SP-617: Proceedings of SOHO 17
8. R. A. García, S. Turck-Chièze, S. J. Jiménez-Reyes, J. Ballot, P. L.Pallé, A. Eff-Darwich, **S. Mathur**, J. Provost
Detection of the periodic signatures of $l=1$ solar g modes with 10 years of GOLF/SoHO data,
2006, ESA SP-617: Proceedings of SOHO 17
9. R. A. García, S. Turck-Chièze, S. J. Jiménez-Reyes, J. Ballot, P. L.Pallé, A. Eff-Darwich, **S. Mathur**, J. Provost
Detection of periodic signatures in the solar power spectrum: on the track of $l=1$ gravity modes,
2006, ESA SP-624: Proceedings of SOHO 18/GONG 2006/HELAS I, Beyond the spherical Sun
10. **S. Mathur**, S. Turck-Chièze, S. Couvidat and R. A. García
Sensitivity of the predicted frequencies of $l=1$ g modes to known physical processes,
2006, ESA SP-624: Proceedings of SOHO 18/GONG 2006/HELAS I, Beyond the spherical Sun
11. S. Turck-Chièze, W. Schmutz, G. Thuillier, ..., **S. Mathur** et al.
The Dynamics perspective,
2006, ESA SP-624: Proceedings of SOHO 18/GONG 2006/HELAS I, Beyond the spherical Sun
12. R. A. García, S. Turck-Chièze, S. J. Jiménez-Reyes, J. Ballot, P. L.Pallé, A. Eff-Darwich, **S. Mathur**, J. Provost
Knowledge of the solar core dynamics through g-modes,
2006, IAU, Prague, REPUBLIC TCHEQUE

2007

13. S. Turck-Chièze, **S. Mathur**, J. Ballot, R. A. García, P.H. Carton, J.-C. Barrière, P. Daniel-Thomas, A. Delbart, D. Desforges, R. Granelli, F. Nunio, Y. Piret, P. L.Pallé, A. Jiménez, S. J. Jiménez-Reyes, R. Simoniello, and the DynaMICCS team
The GOLF-NG prototype and the Solar European Perspective for Cosmic Vision 2015-2025,
2007, HELAS II, Göttingen, GERMANY

2009

14. **S. Mathur**, J.Ballot, A. Eff-Darwich, R. A. García, S. J. Jiménez-Reyes, S. G. Korzennik and S. Turck-Chièze
What can we learn on the Dynamics and the Structure of the solar core with g modes?,
2008, Proceedings of GONG 2008/SOHO 21, Boulder, USA
15. **S. Mathur**, S. J. Jiménez-Reyes and R. A. García
GOLF: a new proxy of solar magnetism,
2008, Proceedings of GONG 2008/SOHO 21, Boulder, USA
16. R. A. García, **S. Mathur**, I. González Hernández and A. Jiménez
Spatial Cross Spectrum: Reducing incoherent convective background of resolved helioseismic instruments,
2008, Proceedings of GONG 2008/SOHO 21, Boulder, USA

- 17.** O. L. Creevey, **S. Mathur** and R. A. García
Sensitivity of p modes for constraining velocities of microscopic diffusion of the elements,
 2008, Proceedings of GONG 2008/SOHO 21, Boulder, USA
- 18.** D. Salabert, S. Turck-Chièze, J.-C. Barrière, P. H. Carton, P. Daniel-Thomas, A. Delbart, R. A. García, R. Granelli, S. J. Jiménez-Reyes, C. Lahonde-Hamdoun, D. Loiseau, **S. Mathur**, F. Nunio, P. L. Pallé, Y. Piret, J. M. Robillot and R. Simoniello
First performances of the GOLF-NG instrumental prototype observing the Sun in Tenerife,
 2008, Proceedings of GONG 2008/SOHO 21, Boulder, USA
- 19.** **S. Mathur**
The quest of solar gravity modes: probing the solar interior,
 2009, ASI bulletin, Bangalore, INDIA
- 20.** **S. Mathur**, R. A. García, C. Régulo, J. Ballot, D. Salabert and W. J. Chaplin
Analysing solar-like oscillations with an automated pipeline,
 2009, American Institute of Physics, Proceedings of the Stellar Pulsation Conference, Santa Fe, USA
- 2010
- 23.** B. Kumar, **S. Mathur**, R.A. García and P. Venkatkrishnan
Can major solar flares excite high-frequency global waves in the Sun ?,
 2010, AN, Proceedings of the Fourth HELAS International Conference, Lanzarote, Spain
- 24.** **S. Mathur**, R.A. García, C. Régulo, O. L. Creevey, J. Ballot and D. Salabert
An automatic pipeline analyzing solar-like oscillating targets tested on CoRoT and simulated data,
 2010, AN, Proceedings of the Fourth HELAS International Conference, Lanzarote, Spain
- 25.** R.A. García, **S. Mathur**, J. Ballot and C. Régulo
Enhancing the signal-to-noise ratio of solar-like targets,
 2010, AN, Proceedings of the Fourth HELAS International Conference, Lanzarote, Spain
- 26.** A. Moya, **S. Mathur** and R.A. García
Accuracy of the numerical computation of solar g modes,
 2010, AN, Proceedings of the Fourth HELAS International Conference, Lanzarote, Spain
- 27.** K.H. Sato, R. A. García, S. Pires, J. Ballot, **S. Mathur**, B. Mosser, E. Rodriguez, J.-L. Starck, K. Uytterhoeven
Inpainting: A powerful interpolation technique for helio- and asteroseismic data,
 2010, AN, Proceedings of the Fourth HELAS International Conference, Lanzarote, Spain
- 28.** R.A. García, J. Ballot, **S. Mathur**, and C. Régulo
Signature of a magnetic activity cycle in HD49933 observed by CoRoT,
 2010, AN, Proceedings of the Fourth HELAS International Conference, Lanzarote, Spain
- 29.** R. A. García, J. Ballot, A. Eff-Darwich, R. Garrido, A. Jiménez, S. Mathis, **S. Mathur**, A. Moya, P. L. Palle, C. Regulo, D. Salabert,, J. C. Suarez and S. Turck-Chièze
Towards a detection of individual g modes in the Sun,
 2010, AN, Proceedings of the Fourth HELAS International Conference, Lanzarote, Spain
- 30.** D. Salabert, R. A. García, **S. Mathur**, A. Moya, P. L. Palle, C. Regulo, D. Salabert,, J. C. Suarez and S. Turck-Chièze
On the likelihood-ratio test applied in asteroseismology for mode identification,
 2010, AN, Proceedings of the Fourth HELAS International Conference, Lanzarote, Spain
- 31.** R. A. García, **S. Mathur**, J. Ballot, and C. Regulo
Enhancing the signal-to-noise ratio of solar-like targets,
 2010, AN, Proceedings of the Fourth HELAS International Conference, Lanzarote, Spain
- 2011
- 31.** **S. Mathur**
Seismic analysis of two solar-type stars observed by Kepler,
 2011, SF2A, Paris, France (Invited talk), 221
- 32.** **S. Mathur**
Stellar activity cycles and contribution of the deeper layers,
 2011, 20th Stellar Pulsation Conference, Granada, Spain (Invited review) (2011arXiv1111.2065M)

2012

33. **S. Mathur**, D. Salabert, R. A. Garcia, C. Régulo, J. Ballot and T. S. Metcalfe
Investigating stellar activity with CoRoT observations,
2012, ASP Proceedings, “Recent progresses in solar/stellar physics with helio- and asteroseismology”,
Hakone, Japan
34. **S. Mathur**, S. Hekker, R. Trampedach, et al.
Investigating the properties of granulation in the red giants observed by Kepler,
2012, ASP Proceedings, “Recent progresses in solar/stellar physics with helio- and asteroseismology”,
Hakone, Japan
35. **S. Mathur**, T. L. Campante, R. Handberg, et al.
Seismic analysis of four solar-like stars observed during more than eight months by Kepler,
2012, ASP Proceedings, “Recent progresses in solar/stellar physics with helio- and asteroseismology”,
Hakone, Japan
36. T. S. Metcalfe, **S. Mathur**, G. Dogan, and M. Woitaszek
First Results from the Asteroseismic Modeling Portal,
2012, ASP Proceedings, “Recent progresses in solar/stellar physics with helio- and asteroseismology”,
Hakone, Japan
37. R. A. García, T. Cellier, T. L. Campante, G. R. Davies, **S. Mathur**, J. C. Suarez, J. Ballot, O. Benomar, A. Bonanno, A. S. Brun, W. J. Chaplin, J. Christensen-Dalsgaard et al.
Fast Rotating solar-like stars using asteroseismic datasets,
2012, ASP Proceedings, “Recent progresses in solar/stellar physics with helio- and asteroseismology”,
Hakone, Japan
38. S. Turck-Chièze, S. Couvidat, A. Eff-Darwich, V. Duez, R. A. García, S. Mathis, **S. Mathur**, L. Piau, and D. Salabert
The long term dynamics of the solar radiative zone associated to new results from SoHO and young solar analogs,
2012, ASP Proceedings, “Recent progresses in solar/stellar physics with helio- and asteroseismology”,
Hakone, Japan

2013

39. **S. Mathur**, C. Catala, H. Bruntt et al.
Asteroseismic Analysis of the CoRoT Target HD 169392,
2013, ASP Proceedings, “Progress in Physics of the Sun and Stars: A New Era in Helio- and Asteroseismology”, Hakone, Japan
40. C. Hedges, **S. Mathur**, M. J. Thompson, K. B. and MacGregor
Oscillations and Surface Rotation of Red Giant Stars
2013, ASP Proceedings, “Progress in Physics of the Sun and Stars: A New Era in Helio- and Asteroseismology”, Hakone, Japan
41. **S. Mathur**
Study of Stellar Magnetic Activity with CoRoT and mboxKepler Data
2013, ASP Proceedings, “Progress in Physics of the Sun and Stars: A New Era in Helio- and Asteroseismology”, Hakone, Japan
42. R.A. García, T. Ceillier, **S. Mathur**, and D. Salabert
Measuring Reliable Surface Rotation Rates from Kepler Photometric Observations
2013, ASP Proceedings, “Progress in Physics of the Sun and Stars: A New Era in Helio- and Asteroseismology”, Hakone, Japan

2014

43. **S. Mathur**, K. Augustson, A. S. Brun, and R. A. García
Dynamo modeling of the Kepler F star KIC 12009504
2014, Cool stars proceedings, Flagstaff, USA
44. **S. Mathur**
Constraining stellar magnetic activity with Asteroseismology
2014, SF2A, Paris, France
45. **S. Mathur**
Towards age/rotation/magnetic activity relation with seismology
2014, CoRoT3-KASC7 meeting, Toulouse, France