

Fatemeh S. Tabatabaei

CONTACT

Dr. Fatemeh Tabatabaei
School of Astronomy
Institute for Research in Fundamental Sciences-IPM
Larak Garden
19395-5531 Tehran, Iran
Tel +98 2123105069
Fax +98 2122806616
Email ftaba@ipm.ir

EXPERTISE/ INTERESTS

Star Formation and Quenching, Structure Formation, Evolution of Galaxies
Physics of the Interstellar Medium: High-Energy Particles, Magnetic Fields, Gas, and Dust
Radio/Sub-mm/Infrared/Optical Observations, Interferometry, Polarization

ACADEMIC EDUCATION

University of Bonn Jan 2005-Jan 2008

Ph.D. in Astrophysics, Title: "Thermal and Nonthermal Emission from the Nearby Galaxy M33", *with highest distinction*
Advisers: Rainer Beck & Marita Krause, Co-adviser: Endrik Krügel

Institute for Advanced Studies in Basic Sciences-IASBS Sept 1997- Jan 2000
MSc in Astrophysics, Title: 'A Phenomenological Study of Evolution of Galaxies and QSOs', *with highest distinction*
Adviser: Sadollah Nasiri Gheydari

University of Tehran Sept 1993- Jun 1997
BSc in Solid-State Physics, *with highest distinction*

APPOINTMENTS

Associate Professor, Institute for Research in Fundamental Sciences, Tehran Since Sep 2018

IAC Genéricos Research Fellow, Instituto de Astrofísica de Canarias, Tenerife, Spain Apr 2015- Sep 2018

Visitor/Observer, National Radio Astronomy Observatory, Socorro, USA Oct 2014- Nov 2014

DFG Postdoc, Max-Planck-Institut für Astronomie, Heidelberg, Germany Mar 2011- Oct 2014

Postdoc, University of Cologne, Köln, Germany Sep 2010- Mar 2011

Postdoc Fellow, Max-Planck-Institut für Radioastronomie, Bonn, Germany Jan 2008- Sep 2010

Ph.D. Scholar, Max-Planck-Institut für Radioastronomie, Bonn, Germany Jan 2005- Jan 2008

Visiting Scientist, MPIfR, Bonn, Germany Sept 2004- Jan 2005

Faculty Member, Damghan University of Basic Sciences, Damghan, Iran	Fall 2003- Spring 2004
Lecturer, Shahrood University of Technology, Shahrood, Iran	Spring 2003
Physics Teacher, Imam Reza Pre-University School, Tehran, Iran	Fall 2000- Fall 2002

DISTINCTIONS

XXX IAU General Assembly grant	2018
Genéricos Fellowship, IAC	2015-2018
German Research Foundation DFG Award	2011-2014
DAAD Scholarship for Conference journeys	2009
Max-Planck-Institute Fellowship	2008- 2010
International Max-Planck Research School (IMPRS) Ph.D. Scholarship	2005-2008
PSI Summer School Scholarship (Special Topics in Physics)	1994

EXTERNALLY FUNDED/GRANTED PROJECTS

<i>Key Insights in Nearby Galaxies: Radio Continuum Survey of the KINGFISH Galaxies,</i> funded by German Research Foundation for <u>my individual research</u> ~ 90,000€	2011-2014
<i>The structure and evolution of galaxies and their central regions,</i> funded by Spanish Ministry of Economy and Competitiveness research grant (AYA2016-76219-P) ~150,000€ plus funding for one 4-year PhD student (PI: J. H. Knapen)	2017-2021

OBSERVING GRANTS

Granted 300 h observing time as Principal Investigator (PI)

30 h	<i>A Deep Hβ Survey of Nearby Galaxies, 4-m William Herschel Telescope</i>	2016/2017
45 h	<i>Low-Frequency Properties of the ISM in M33, Giant Meter Radio Telescope</i>	2012/2013
45 h	<i>Uncovering the Magnetized ISM in M33, Karl Jansky VLA</i>	2011/2012
30 h	<i>Cold Dust in Barred Galaxies, APEX telescope</i>	2008/2010
25 h	<i>HERA 13CO(2-1) Observations of the Antennae Galaxy, IRAM 30-m telescope</i>	2009/2010
25 h	<i>The Radio–FIR Correlation in M33, Very Large Array (VLA)</i>	2005/2006
100 h	<i>Thermal and Nonthermal Emission from M33, Effelsberg 100-m telescope</i>	2005/2006

Granted 548 h observing time as Co-Investigator (Co-I)

68 h	<i>Quintet re-visited: a deep search for extended continuum emission and intergalactic polarization inside a compact galaxy group, LOFAR</i>	2019/2020
2 h	<i>ALMA Observations of Dust Polarization in M83, PI: R. Paladino</i>	2016/2017
80 h	<i>VLA Observations of Star Formation in M51, PI: E. Schinnerer</i>	2013/2014
60 h	<i>A Complete and Deep JVLA Continuum Survey of M31, PI: A. Leroy</i>	2011/2012
18 h	<i>Radio-IR Relation on Sub-kpc Scales with JVLA, PI: E. Schinnerer</i>	2011/2013
100 h	<i>A Complete and Deep HERA Map of M33, IRAM 30-m, PI: J. Braine</i>	2009/2010
220 h	<i>Herschel M33 Extended Survey (<i>HerM33es</i>), Herschel Space Observatory, PI: C.Kramer</i>	2010/2012

STUDENT PROJECTS ADVISED

- “Mapping Extinction in Nearby Galaxies” 2017-2018
Graduate Student Eduardo Alberto Mantero Castaneda's Master thesis Project
University of La Laguna
- “The ISM Energy Balance in the Surroundings of Super-massive Black Holes ” 2015-2016
Graduate Student Paloma Minguez's Master thesis Project, University of La Laguna
(as part of an article we published in the Nature Journal)
- “Pattern Recognition and Image Analysis in Astronomy:
A Multi-Scale Analysis of Star Formation Laws” Summer 2015
Graduate Student Marta Reina-Campos' Summer Project, Instituto de Astrofísica de Canarias

TEACHING EXPERIENCE

- Institute for Research in Fundamental Sciences-IPM** Spring 2020
Physics of Interstellar Medium
- Damghan University of Basic Sciences** 2003/2004
Thermodynamics (Zemansky)
Fundamentals of Physics I and II (Halliday)
Physics Lab (I, II) for Physics Students
- Shahrood University of Technology** Spring 2003
Fundamentals of Physics I (Halliday)
Physics Lab (I) for Engineering Students

SELECTED PRESENTATIONS (Last 5 years)

- Contributed Talk at *The Laws of Star Formation: From Cosmic Dawn to the Present* , July 2018
Cambridge University, UK
- Invited Plenary Talk** at the *Spanish SKA Meeting*, Valencia, Spain Nov 2017
- Contributed Talk at the *Measuring Star Formation in the Radio,* July 2017
Millimeter, and Submillimeter Conference, Manchester, UK
- Invited Talk** at the *Nearby Galaxies at Low Frequencies Meeting*, May/June 2017
Onsala, Sweden (Declined)
- Contributed Talk at Canadian Astronomical Society (CASCA) meeting May/June 2017
entitled “ The Radio Spectral Energy Distribution and Star Formation
Calibration in Galaxies”, Alberta, Canada
- Contributed Talk at EWASS 2017 entitled *Star Formation & Feedback* Jun 2017
in Nearby Galaxies, Prague, Czech Republic
- Contributed Talk at The Broad Impact of Low-Frequency Observing Jun 2017
conference entitled *Cloud-Scale GMRT Survey of M33*, Bologna, Italy
- Invited Talk** at the DFG Research Unit *1254 Workshop*, Sept
2016
entitled *The KINGFISHER Radio Survey with 100-m*, Berlin, Germany
- Invited Review Talk** at European Week of Astronomy-EWASS entitled Jun 2015

The Physics behind The Radio-IR Correlation, Tenerife, Spain

Invited Colloquium entitled “Impact of Star Formation on Dusty and Magnetized ISM in Galaxies”, Tenerife, Spain Jun 2015

Invited Talk at International Conference *Galaxies Inside and Out*, IPM, Tehran Jan 2015

Invited Colloquium entitled “Radio-FIR Correlation as a Probe to Star Formation-ISM Interplay in Galaxies”, Astron, The Netherlands May 2013

Invited Colloquium entitled “Impact of Star Formation on Dusty & Magnetized ISM”, Universität zu Köln, Köln, Germany May 2014

Invited Colloquium entitled “Resolved Radio-FIR Correlation as a Probe to Star Formation/ISM Interplay”, ARI, Heidelberg Jan 2014

Invited Colloquium entitled “Magnetized ISM in Nearby Galaxies”, HITS, Heidelberg, Germany Dec 2014

Invited Talk at the *DFG Research Unit 1254 Workshop*, Mainz, Germany July 2012

PEER REVIEW/COMMITTEE PANELS

Review Panel, ESO observing proposal committee 2018

Reviewer, Polish National Science Centre (NCN) 2018

The SUNDIAL Ph.D. Selection Committee at IAC Jan 2017

Review Panel, Giant Meter Wave Telescope 2012

Journal Referee, MNRAS, A&A, and AAS Journals since 2008

CONFERENCES ORGANIZED

Physics Opportunities with a New Universe's View: The SKA Radio Telescope, 6-7 Nov 2017, Valencia, Spain, served as SOC

Measuring Star formation in the Radio, Millimeter, and Sub-millimeter, 24-26 Jul 2017, Manchester, UK, served as SOC

The Physics behind the Radio-IR Correlation at European Week of Astronomy, 22-26 Jun 2015, Tenerife Spain, served as SOC

Max-Planck-Institut für Astronomie Retreat 2013 (Cosmology-Galaxy Department), 22-24 Oct 2013, served as SOC & LOC

OUTREACH

IAC Press Release “ Why is massive star formation quenched in galaxy centers?” Nov 2017

MPIA/MPIfR/IAC Press Release “Tune your radio: Galaxies sing when forming stars” Feb 2017

Radio Gavá Interview “Cosmic Magnetism” 25 Apr 2016

Press Release “New twist to galactic magnetic fields” Feb 2016

Co-organizing the IASBS' International Total Eclipse Campaign 11 Aug 1999

Organizing night sky tours and meteor-shower observing campaigns, Physics Group, Department of Science, Tehran University 1994-1997

LARGE COLLABORATIONS & SOCIETIES

SKA Science Working Group ' <i>Continuum</i> '	since 2016
Herschel Key Science Project ' <i>KINGFISH</i> '	since 2012
Herschel Key Science Project ' <i>HerM33es</i> '	since 2009
LOFAR ' <i>Magnetism</i> ' Group	since 2009
German Long Wavelength Consortium (GLOW)	2013-2015
German Astronomical Society	2012-2015
German Network of Female Astronomers (AFN)	2011-2015

COMPUTING SKILLS

Languages Fortran, IDL, Python
Platforms LINUX, Windows, Mac OS
Packages AIPS, GILDAS, CASA

Techniques & Codes Developed

TRT Thermal/Nonthermal Decomposition and Mapping
Wavelet Analysis-Pattern Recognition and Cross-Correlation Techniques
Radio & Infrared SED Modeling/Bayesian MCMC Fitting
Newton-Raphson Iteration Technique (solving non-linear equations)
Monte-Carlo Simulations

SELECTED SCHOOLS & WORKSHOPS ATTENDED

James Webb Space Telescope workshop – GO1 proposal planning	Mar 2018
4 th JVLA Data Reduction Workshop, NRAO, Socorro, NM, USA	Oct
2014	
7 th IRAM Interferometry School 2010, Grenoble, France	Oct 2010
Herschel Science Demonstration Phase Data Processing Workshop, ESAC Madrid, Spain	Dec 2009
23 rd IAU International School for Young Astronomers (ISYA), Zanjan, Iran	July 1997
Second Special Topics in Physics School, held by the Physics Society of Iran for outstanding Physics students, Zanjan, Iran	May 1995

LANGUAGES

Persian (Native)
English (C2)
German (B2)
Spanish (B1)

PUBLICATIONS

Total number: 77
H-index: 30 (according to Google Scholar)
Number of citations: 2710, cited by >20 review articles

Articles in Refereed Journals

59. *Multifrequency radio continuum observations of the Pinwheel galaxy (M 101)*, Sridhar S., Heald, G., Beck, R., ...[Tabatabaei, F. S.](#) et al., 2021, accepted for publication in A&A
58. *The magnetized disk-halo transition region of M 51* Kierdorf, M., Mao, S. A., Beck, R., ...[Tabatabaei, F. S.](#) et al., A&A 2020, 642, 118
57. *Gas and dust cooling along the major axis of M 33 (HerM33es). Herschel/PACS [C II] and [O I] observations* Kramer, C., Thomas, N., Sibylle, A....[Tabatabaei, F. S.](#) et al., A&A, 2020, 639, 61
56. *Radio emission during the formation of stellar clusters in M 33* Corbelli, E., Braine, J., [Tabatabaei, F. S.](#), A&A, 2020, 639, 27
55. *Probing the cold magnetised Universe with SPICA-POL (B-BOP)* Andre, Ph., Hughes, A., Guillet, V.,...[Tabatabaei, F. S.](#) et al., PASA 2019, 36, 29
54. *Global correlations between the radio continuum, infrared, and CO emissions in dwarf galaxies* Filho, M. E., [Tabatabaei, F. S.](#), Almeida, J. S. et al. MNRAS 2019, 484, 543
53. *Radio Continuum Emission from Galaxies: An Accounting of Energetic Processes* Murphy, E. J., Condon, J. J., Alberdi, A., ...[Tabatabaei, F. S.](#) et al., ASPC 2018, 517, 421
52. *Investigation of the cosmic ray population and magnetic field strength in the halo of NGC 891* Mulcahy, D. D., Horneffer, A., Beck, R. ...[Tabatabaei, F. S.](#), et al., A&A 2018, 615, 98
51. *Spatially resolving the dust properties and submillimetre excess in M 33*, Relaño, M., De Looze, I.; Kennicutt, R.C.,...[Tabatabaei, F. S.](#), et al., A&A 2017, 600, 27
50. *Discovery of massive star formation quenching by nonthermal effects in the center of NGC 1097*, [Tabatabaei, F. S.](#), Minguez, P., Prieto, M.A., Fernández-Ontiveros, J.A., **Nature Astronomy** 2018, 2, 83
49. *Exploring the making of a galactic wind in the star-bursting dwarf irregular galaxy IC 10 with LOFAR*, Heesen, V., Rafferty, D. A., Horneffer, A.,...[Tabatabaei, F. S.](#), et al., Monthly Notices of the Royal Astronomical Society (MNRAS) 2018, 476, 1756
48. *The Radio Spectral Energy Distribution and Star-formation Rate Calibration in Galaxies*, [Tabatabaei, F. S.](#), Schinnerer, E., Krause, M., Dumas, G., et al., Astrophysical Journal (ApJ) 2017, 836, 185
47. *Updated 34-band Photometry for the Sings/KINGFISH Samples of Nearby Galaxies*, Dale, D. A., Cook, D. O., Roussel, H., ... [Tabatabaei, F. S.](#), et al., ApJ 2017, 837, 90
46. *The molecular gas mass of M33*, Gratier, P., Braine, J., Schuster, K., ... [Tabatabaei, F. S.](#), et al., A&A 2017, 600, 27
45. *The UK Infrared Telescope M 33 monitoring project - V. The star formation history across the galactic disc*, Javadi, A., van Loon, J. Th., Khosroshahi, H. G., [Tabatabaei, F. S.](#), et al., MNRAS 2017, 464, 2103
44. *An Empirical Relation between the Large-scale Magnetic Field and the Dynamical Mass in Galaxies*,

- Tabatabaei, F.S., Martinsson, T. P. K., Knapen, J. H. et al. **Astrophysical Journal Letters**, 2016, 818, L10
43. *Towards universal hybrid star formation rate estimators*, Boquien, M., Kennicutt, R., Calzetti, D., ... Tabatabaei, F.S., A&A 2016, 591, 6
 42. *The Ionized Gas in Nearby Galaxies as Traced by the [NII] 122 and 205 μ m Transitions*, Herrera-Camus, R., Bolatto, A., Smith, J. D., ... Tabatabaei, F.S., et al., ApJ 2016, 826, 175
 41. *Measuring star formation with resolved observations: the test case of M 33*, Boquien, M., Calzetti, D., Aalto, S., Boselli, A., ...Tabatabaei, F.S., et al., A&A 2015, 578, 8
 40. *[C II] 158 μ m Emission as a Star Formation Tracer*, Herrera-Camus, R.; Bolatto, A. D., Wolfire, M. G.,...Tabatabaei, F.S., et al. , ApJ 2015, 800, 1
 39. *Properties of the Magneto-ionic Medium in the Halo of M51 Revealed by Wide-band Polarimetry*, Mao, S., A., Zweibel, E., Ott, J., Tabatabaei, F., ApJ 2015, 800, 92
 38. *The Astrophysics of Star Formation Across Cosmic Time at >10 GHz with the Square Kilometre Array*, Murphy, E.M., et al., Book ' *Advancing Astrophysics with the Square Kilometre Array*, editor: SKA Organisation, 2015, p1169
 37. *Magnetic Field Tomography in Nearby Galaxies with the Square Kilometre Array*, Heald, G., et al., Book ' *Advancing Astrophysics with the Square Kilometre Array*, editor: SKA Organisation, 2015, p525
 36. *Structure, dynamical impact and origin of magnetic fields in nearby galaxies in the SKA era*, Beck, R., et al., Book ' *Advancing Astrophysics with the Square Kilometre Array*, editor: SKA Organisation, 2015, p407
 35. *Variation in the dust emissivity index across M33 with Herschel and Spitzer (HerM33es)*, Tabatabaei, F.S., Braine, J., Xilouris, E. M., et al., A&A 2014, 561, 95
 34. *An observational test for correlations between cosmic rays and magnetic fields*, Stepanov, R., Shukurov, A., Fletcher, A., Beck, R., La Porta, L., Tabatabaei, F.S., MNRAS 2014, 437, 2201
 33. *Untangling the Nature of Spatial Variations of Cold Dust Properties in Star Forming Galaxies*, Kirkpatrick, A., Calzetti, D., Kennicutt, R., Galametz, M. Tabatabaei, F.S., ApJ 2014, 789, 130
 32. *A Far-IR View of the Starburst-driven Superwind in NGC 2146*, Kreckel, K., Armus, L., Groves, B., ... Tabatabaei, F.S., ApJ 2014, 790, 26
 31. *A detailed study of the radio-FIR correlation in NGC 6946 with Herschel-PACS/SPIRE from KINGFISH*, Tabatabaei, F.S., Schinnerer, E., et al., A&A 2013, 552, 19
 30. *Multi-scale radio-infrared correlations in M 31 and M 33: The role of magnetic fields and star formation*, Tabatabaei, F.S., Berkhuijsen, E. M., Frick, P. et al, A&A 2013, 557, 129
 29. *Calibration of the total infrared luminosity of nearby galaxies from Spitzer and Herschel bands*, Galametz, M., Kennicutt, R. C., ...Tabatabaei, F. et al., MNRAS 2013, 431, 1956

28. *How cosmic ray electron propagation affects radio-far-infrared correlations in M 31 and M 33*, Berkhuijsen, E. M., Beck, R., [Tabatabaei, F.S.](#), MNRAS 2013, 435, 1598
27. *Mapping Dust through Emission and Absorption in Nearby Galaxies*, Kreckel, K., Groves, B., Schinnerer, E., ... [Tabatabaei, F.S.](#) et al., ApJ 2013, 771, 62
26. *Spectral energy distributions of H II regions in M 33 (HerM33es)*, Relano, M., Verley, S., ... [Tabatabaei, F.S.](#), et al., A&A 2013, 552, 140
25. *Cold Dust in the Giant Barred Galaxy NGC 1365*, [Tabatabaei, F.S.](#), Weiss, A., Combes, F., et al., A&A 2013, 555, 128
24. *The heating of dust by old stellar populations in the bulge of M31*, Groves, B., Krause, O., Sandstrom, K., ... [Tabatabaei, F.S.](#) et al., MNRAS 2012, 426, 892
23. *Mapping the cold dust temperatures and masses of nearby KINGFISH galaxies with Herschel*, Galametz, M., Kennicutt, R. C., ... [Tabatabaei, F.S.](#), et al., MNRAS 2012, 425, 763
22. *Cool and warm dust emission from M 33 (HerM33es)*, Xilouris, E. M., [Tabatabaei, F.S.](#), Boquien, M., et al. A&A 2012, 543, 74
21. *Cool Dust in the Outer Ring of NGC 1291*, Hinz, J. L., Engelbracht, C. W., Skibba, R., ... [Tabatabaei, F.S.](#), ApJ 2012, 756, 75
20. *Spectrally resolved C II emission in M 33 (HerM33es): Physical conditions and kinematics around BCLMP 691*, Braine, J., Gratier, P., ... [Tabatabaei, F.S.](#) et al., A&A 2012, 544, 55
19. *Dust and gas power spectrum in M 33 (HERM33ES)*, Combes, F. Boquien, M., Kramer, C., ... [Tabatabaei, F.S.](#) et al. A&A 2012, 539, 67
18. *Herschel Far-infrared and Submillimeter Photometry for the KINGFISH Sample of nearby Galaxies*, Dale, D. A., Aniano, G., Engelbracht, C. W., ... [Tabatabaei, F.](#) et al. ApJ 2012, 745, 95
17. *Corrigendum: The Herschel M 33 extended survey (HerM33es): PACS spectroscopy of starforming region BCLMP302*, Mookerjea, B., Kramer, C., ... [Tabatabaei, F.S.](#) A&A 2012, 537, 3
16. *The Herschel M 33 extended survey (HerM33es): PACS spectroscopy of starforming region BCLMP302*, Mookerjea, B., Kramer, C., ... [Tabatabaei, F.S.](#) A&A 2011, 532, 152
15. *Local Radio-IR correlation in M51*, Dumas, G., Schinnerer, E., [Tabatabaei, F.S.](#), et al., AJ 2011, 141, 41
14. *Relating dust, gas and the rate of star formation in M31*, [Tabatabaei, F.S.](#) & Berkhuijsen, E. M. A&A 2010, 517, 77
13. *Molecular and atomic gas in the Local Group galaxy M 33*, Gratier, P., Braine, J., Rodriguez-Fernandez, N. J., ... [Tabatabaei, F.S.](#) et al., A&A 2010, 522, 3
12. *Lack of Interaction Between the Dust Grains and the Anomalous Radio Jet in the Nearby Spiral Galaxy NGC 4258*, Laine, S., Krause, M., [Tabatabaei, F.S.](#), Siopis, C. AJ 2010, 140, 1084

11. *Cool gas and dust in M 33: Results from the HERschel M 33 Extended Survey (HERM33ES)*, Braine, J., Gratier, P., Kramer, C., ...[Tabatabaei, F.S.](#) et al. A&A 2010, 518, 69
10. *Molecular cloud formation and star formation efficiency in M 33. Molecule and star formation in M 33*, Braine, J., Gratier, P.,...[Tabatabaei, F.S.](#) et al., A&A 2010, 520, 107
9. *100 μ m and 160 μ m emission as resolved star-formation rate estimators in M 33 (HERM33ES)*, Boquien, M., Calzetti, D., Kramer, C. ,...[Tabatabaei, F.S.](#) et al., A&A 2010, 518, 70
8. *Searching for Dark Matter in Messier 33*, Borriello, E., Longo, G.,...[Tabatabaei, F.S.](#) et al., ApJL 2010, 709, 32
7. *Properties of compact 250 μ m emission and H II regions in M 33 (HERM33ES)*, Verley, S., Relano, M., Kramer, C.,...[Tabatabaei, F.S.](#) et al. A&A 2010, 518, 68
6. *PACS and SPIRE photometer maps of M 33: First results of the HERschel M 33 Extended Survey*, Kramer, C.,...[Tabatabaei, F.S.](#) et al. A&A 2010, 518, 67
5. *High resolution radio continuum survey of M33: III. Magnetic Fields*, [Tabatabaei, F.S.](#), Krause, M., Beck, R. & Fletcher A., A&A 2008, 490, 1005
4. *High resolution radio continuum survey of M33: II. Thermal and nonthermal emission*, [Tabatabaei, F.S.](#), Beck, R., Krügel, E., et al. A&A 2007c, 475, 133
3. *A multi-scale study of far-infrared and radio emission from Scd galaxy M33*, [Tabatabaei, F.S.](#), Beck, R., Krause, M., et al. A&A 2007b, 466, 509
2. *High-resolution radio continuum survey of M 33. I. The radio maps*, [Tabatabaei, F.S.](#), Krause, M., and Beck, R. A&A 2007a, V. 472, 785
1. *Variation of the radio synchrotron spectral index in the interstellar medium of M33*, [Tabatabaei, F.S.](#), et al., Astron. Nacht. 2007, 328, 636

Published Articles in Foreign Conference Proceedings

18. *Science with an ngVLA: Radio Continuum Emission from Galaxies: An Accounting of Energetic Processes*, Murphy, E., Condon, J., J., Alberdi, A., ..[Tabatabaei, F.S.](#), et al., ASP Monograph Series, "Science with a Next-Generation VLA", ed. E. J. Murphy (ASP, San Francisco, CA)
17. *Towards a Theory for Star Formation on All Scales*, Murphy, E., Armus, L., Bolatto A., ..[Tabatabaei, F.S.](#), et al. Astro2020: Decadal Survey on Astronomy and Astrophysics, science white papers, n2019 o. 523; Bulletin of the American Astronomical Society, Vol. 51, Issue 3, id. 523
16. *Twinkle little stars: Massive stars are quenched in strong magnetic fields* [Tabatabaei, F.S.](#), Prieto, M. A., Fernández-Ontiveros, J. A., IAUGA 2020, 30, 118
15. *The magnetized disk-halo transition region of M 51* Kierdorf, M., Mao, S. A., Beck, R., ...[Tabatabaei, F.S.](#) et al., IAUGA 2020, 30, 319
14. *Uncovering star formation feedback and magnetism in galaxies with radio continuum surveys*, [Tabatabaei, F.S.](#), Highlights on Spanish Astrophysics IX, July 18-22, 2016, Bilbao, Spain

13. *Unveiling The Physics of Star Formation and Feedback in Galaxies*,
Tabatabaei, F.S., Proceedings of the conference "The many facets of extragalactic radio surveys: towards new scientific challenges", 20-23 Oct. 2015, Bologna, Italy
12. *Dust emission from the atomic and molecular gas in M 33: a changing beta*,
Braine J., Tabatabaei, F.S., Xilouris, M., Highlights of Astronomy (HiA) 2015, 16, 617, IAU XXIX General Assembly Highlights, 3-14 August 2016, Hawaii, USA
11. *The resolved radio-FIR correlation in nearby galaxies with Herschel and Spitzer*,
Tabatabaei, F. S. et al., Proceedings of the International Astronomical Union, IAU Symposium (IAUS) 2012, Volume 284, p. 400-403, September 5-9 2011, Preston, UK
10. *Variation in the dust spectral index across M33*,
Tabatabaei, F.S. et al., Proceedings of the International Astronomical Union, IAU Symposium (IAUS) 2012, Volume 284, p. 125-127, September 5-9 2011, Preston, UK
9. *The Herschel M33 Extended Survey: first results*,
Bertoldi, F. Kramer, C. ...Tabatabaei, F.S. et al. 38th COSPAR Scientific Assembly 18-15 July 2010, Bremen, Germany
8. *The Herschel view of HII regions in M 33 (HERM33ES)*,
Verley, S., Relaño, M., Kramer, C. et al., Proceedings of the Annual meeting of the French Society of Astronomy and Astrophysics, SF2A-2010, p.57, 21-24 June 2010, Marseille, France
7. *Magnetism in the nearby galaxy M33*,
Tabatabaei, F.S., et al., Proceedings of the International Astronomical Union Symposium, 2009, v. 259, p.545, 3-7 November 2008, Tenerife, Spain
6. *Relative distributions of cosmic ray electrons and magnetic fields in the ISM*,
Stepanov, R., Fletcher, A., Shukurov, A., Beck, R., La Porta, L., Tabatabaei, F.S., Proceedings of the International Astronomical Union Symposium 2009, v.259, p.93, 3-7 November 2008, Tenerife, Spain
5. *The radio-infrared correlation in galaxies*,
Tabatabaei, F. S., Beck, R., Brkhuijsen, E., Highlights of Astronomy (HiA) 2010, Volume 15, p. 417-417, IAU XXVI General Assembly 3-14 August, 2009, Rio de Janeiro, Brazil
4. *Interaction between Dust Grains and the Radio Jet in NGC 4258*,
Laine, S. J., Krause, M., Tabatabaei, F., Sopijs, C. Bulletin of American Astronomical Society Meeting 213, v. 41, p. 455, 4-9 January 2009, California, USA
3. *A Multiscale Study of Infrared and Radio Emission from M33*,
Tabatabaei, F.S., et al., ASP Conference Series v. 396, p.396, 87, Proceedings of the conference 'Formation and Evolution of Galaxy Disks', 1-5 October 2007, Rome, Italy
2. *Variations of the Radio Synchrotron Spectral Index in M33*,
Tabatabaei, F.S., et al., ASP Conference Series v. 396, p. 87, Proceedings of the conference 'Formation and Evolution of Galaxy Disks', 1-5 October 2007, Rome, Italy
1. *Spitzer Images of M33: A Probe to Radio-FIR Correlation*,
Tabatabaei, F.S., et al., Astronomische Nachrichten 2005, 326, 532, Proceedings of the German Annual meeting of Astronomy, 26 September - 1 October 2005, Köln, Germany