



Valeria Grisoni, *PhD*

Personal data

PLACE AND DATE OF BIRTH: Trieste, Italy | 23rd June 1992

EMAIL: valeria.grisoni@unibo.it

SKYPE: live:valeria.grisoni

Professional experience

2021-PRESENT **Postdoctoral researcher**, University of Bologna (Bologna, Italy)
Project: ERC - Asterochronometry: Galactic archeology with high temporal resolution
Advisor: Prof. A. Miglio

2020-2021 **Postdoctoral researcher**, SISSA (Trieste, Italy)
Project: Galactic archaeology: the formation and evolution of the Milky Way
Advisors: Prof. A. Bressan and Prof. A. Lapi

Education

- 2020 **PhD in Physics**,
Università degli Studi di Trieste, Trieste, Italy
Thesis: "Galactic archaeology in the era of large surveys"
Supervisor: Prof. F. Matteucci, Co-supervisor: Dr. E. Spitoni
The Thesis was awarded the "Pietro Tacchini" Prize 2021 for the best Italian Ph.D. Thesis in Astronomy
- 2016 **Master degree in Physics**,
Università degli Studi di Trieste, Trieste, Italy
Thesis: "Formation and evolution of the Milky Way from large and recent spectroscopic galactic surveys"
Supervisor: Prof. F. Matteucci, Co-supervisor: Dr. E. Spitoni
Final grade: 110/110 cum laude
- 2014 **Bachelor degree in Physics**,
Università degli Studi di Trieste, Trieste, Italy
Thesis: "Nonlocalità in meccanica quantistica: il teorema di Bell"
Supervisor: Prof. A. Bassi
Final grade: 110/110 cum laude
- 2011 **High school degree**,
Liceo Classico "F. Petrarca", Trieste, Italy
Final grade: 100/100 cum laude

Research visits

- 08/2021 Leibniz-Institut für Astrophysik Potsdam AIP, Potsdam, Germany.
Visiting dr. C. Chiappini
- 07/2021 University of Bologna, Bologna, Italy.
Visiting prof. A. Miglio
- 03/2019 INAF Bologna, Bologna, Italy.
Visiting dr. D. Romano
- 03/2017 Observatoire de la Côte d'Azur, Nice, France.
Visiting dr. P. de Laverny & dr. A. Recio-Blanco

Doctoral schools

- 03/2018 5th Young Astronomer School "Scientific Exploitation of the Gaia Data"
Paris, France, 26 February-02 March 2018
- 11/2017 XXIX Canary Islands Winter School of Astrophysics "Applications of Radiative Transfer to stellar and planetary atmospheres"
La Laguna, Tenerife, Spain, 13-17 November 2017

Publications

Refereed publications

Nitrogen evolution in the thick disc, thin disc and bulge of the Galaxy

Grisoni, V., Matteucci F., Romano D., 2021, arXiv, arXiv:2109.03642, accepted by MNRAS

The Gaia-ESO Survey: Galactic evolution of lithium from iDR6

Romano, D.; Magrini, L.; Randich, S.; Casali, G.; Bonifacio, P.; Jeffries, R. D.; Matteucci, F.; Franciosini, E.; Spina, L.; Guiglion, G.; Chiappini, C.; Mucciarelli, A.; Ventura, P.; Grisoni, V. et al., 2021, arXiv, arXiv:2106.11614, accepted by A&A

On the effects of the Initial Mass Function on Galactic chemical enrichment

Goswami, S., Slemer, A., Marigo, P., Bressan, A., Silva, L., Spera, M., Boco, L., Grisoni, V., Pantoni, L., Lapi, A., 2021, A&A, 650, A203

APOGEE DR16: a multi-zone chemical evolution model for the Galactic disc based on MCMC methods

Spitoni, E., Verma, K., Silva Aguirre, V., Vincenzo, F., Matteucci, F., Vaicekauskaitė, B., Palla, M., Grisoni, V., Calura, F., 2021, A&A, 647, A73

Fluorine in the solar neighborhood: modelling the Galactic thick and thin discs

Grisoni V., Romano D., Spitoni E., Matteucci F., Ryde N., Jönsson H., 2020, MNRAS, 498, 1252

Chemical evolution of the Milky Way: constraints on the formation of the thick and thin discs

Palla, M., Matteucci, F., Spitoni, E., Vincenzo, F. Grisoni, V., 2020, MNRAS, 498, 1710

The variation of carbon abundance in galaxies and its implications

Romano D., Franchini M., Grisoni, V., et al., 2020, A&A, 639, A37

Heavy element evolution in the inner regions of the Milky Way

Matteucci F., Vasini A., Grisoni, V., Schultheis M., 2020, MNRAS, 494, 5534

Modelling the chemical evolution of Zr, La, Ce and Eu in the Galactic discs and bulge

Grisoni, V., Cescutti G., Matteucci F., Forsberg R., Jönsson H., Ryde N., 2020, MNRAS, 492, 2828

Evolution of lithium in the Milky Way halo, discs and bulge

Grisoni, V., Matteucci F., Romano D., Fu X., 2019, MNRAS, 489, 3539

The origin of stellar populations in the Galactic bulge from chemical abundances

Matteucci, F., Grisoni, V., Spitoni E., et al., 2019, MNRAS, 487, 5363

Galactic Archaeology with asteroseismic ages: evidence for delayed gas infall in the formation of the Milky Way disc

Spitoni, E., Silva Aguirre, V., Matteucci, F., Calura, F., & Grisoni, V. 2019, A&A, 623, A60

Abundance gradients along the Galactic disc from chemical evolution models

Grisoni, V., Spitoni, E., & Matteucci, F. 2018, MNRAS, 481, 2570

The AMBRE Project: chemical evolution models for the Milky Way thick and thin discs

Grisoni, V., Spitoni, E., Matteucci, F., Recio-Blanco, A., de Laverny, P., Hayden, M., Mikolaitis, S., Worley, C. C. 2017, MNRAS, 472, 3637

[Submitted publications](#)

The impact of very massive stars on the chemical evolution of extremely metal-poor galaxies

Goswami, S., Grisoni, V., Silva, L., Bressan, A., 2021, submitted to A&A

[Conference proceedings](#)

Chemical evolution models of the Galactic thick and thin discs

Grisoni, V., Matteucci, F., Spitoni, 2021, to appear in the Workshop Series of the Asociacion Argentina de Astronomia

Evolution of lithium in the Galactic discs

Grisoni, V., Matteucci, F., Romano, D., Fu, X., 2020, MmSAI, 91, 163

Lithium and the chemical evolution of the Milky Way

Matteucci, F., Grisoni, V., Romano, D., 2020, MmSAI, 91, 128

Highlights in the Milky Way

Matteucci, F., Spitoni, E., & Grisoni, V. 2018, Rediscovering Our Galaxy, 334, 298

[Other publications](#)

L'archeologia galattica e la storia della nostra Galassia

Grisoni, V., 2021, to appear in Giornale di Astronomia (invited article for winning the "Pietro Tacchini" Prize)

[Talks/Posters](#)

08/2021 **Galactic archaeology with chemical evolution models** (talk)

Group meeting, Leibniz Institute for Astrophysics Potsdam, Germany, Potsdam, 25th August, 2021

07/2021 **Chemical evolution models of the Galaxy** (talk)

Virtual meeting, NAM2021, Cosmic Chemical Evolution
Virtual conference originally planned in Bath, UK, 23th July, 2021

06/2021 **Galactic chemical evolution models: from lithium to europium** (talk)

Virtual meeting, GALAH Science Meeting
Virtual conference originally planned in Sydney, Australia, 22-24th June, 2021

- 05/2021 **Chemical evolution of the Milky Way** (talk)
Seminar, INAF Osservatorio di Trieste, Trieste, Italy
Virtual seminar at INAF-OATS, 5th May, 2021
- 05/2021 **Chemical evolution models of the Galactic thick and thin discs** (poster)
Third workshop "Chemical Abundances in Gaseous Nebulae"
Virtual conference originally planned in Brasil, 24-28th May, 2021
- 12/2020 **Chemical evolution models for the thick and thin disks** (talk)
Conference "Linking the Galactic and Extragalactic - Stellar dynamics and stellar populations of the Milky Way and its siblings"
Virtual conference originally planned in Wollongong, Australia, 3-4 December, 2020
- 06/2020 **Galactic archaeology: from lithium to europium** (talk)
Seminar, SISSA, Trieste, Italy
Virtual seminar at SISSA, 16th June, 2020
- 01/2020 **Light and heavy elements in the Milky Way** (talk)
Workshop "Chemical evolution of galaxies: the next 25 years"
Sexten Center for Astrophysics, Sexten, Italy, 6-11 January, 2020
- 11/2019 **Evolution of lithium in the Galactic discs** (poster)
Conference "Lithium in the Universe: To Be or not to Be?"
Observatory of Rome, 18-22 November 2019
- 10/2019 **Galactic archaeology in the era of large surveys** (talk)
Special journal club/seminar, INAF Osservatorio di Trieste, Trieste, Italy
Trieste, Italy, 17th October 2019
- 06/2019 **Disc stellar abundances** (talk)
Conference "Stars without borders: a Galaxy in crisis"
Ljubljana, Slovenia, 13-16 June
- 01/2019 **Abundance gradients in the Milky Way thin disc** (talk)
Workshop "Galactic Archaeology in the Gaia Era"
Sexten Center for Astrophysics, Sexten, Italy, 28 January- 1 February, 2019
- 11/2018 **Chemical evolution models for the Milky Way thick and thin discs** (talk)
Conference "Chemical evolution and nucleosynthesis across the Galaxy"
Heidelberg, Germany, 26-29 November 2018
- 11/2018 **Chemical evolution models for the Milky Way thick and thin discs** (talk)
Conference "The life and times of the Milky Way"
Shanghai, China, 12-16 November 2018
- 10/2018 **Chemical evolution models for the Milky Way thick and thin discs in the Gaia Era** (talk)
9th Gaia Science Alerts Workshop
Vipava, Slovenia, 10 October 2018
- 09/2018 **The chemical evolution of the Milky Way in the Gaia era** (talk)
Abundance gradients along the Galactic disc in the era of large surveys
(poster)
ESO Workshop: A revolution in stellar physics with Gaia and large surveys
Warsaw, Poland, 3-7 September 2018

- 02/2018 **The AMBRE Project: formation and evolution of the Milky Way disc** (talk and poster)
5th Young Astronomer School on the Scientific Exploitation of the Gaia Data
Paris, France, 26 February-02 March 2018
- 01/2018 **Abundance gradients of the Milky Way thin disc** (talk)
Workshop "Chemical and dynamical evolution of galaxies"
Sexten Center for Astrophysics, Sexten, Italy, January 22-26, 2018
- 11/2017 **The AMBRE Project: formation and evolution of the Milky Way disc** (poster)
XXIX Canary Islands Winter School of Astrophysics
La Laguna, Tenerife, Spain, November 13-17, 2017
- 09/2017 **Modelling the chemical evolution of the Milky Way thick and thin discs** (talk)
ASTRO-TS 2017 Meeting
SISSA, Trieste, Italy, September 25-26, 2017
- 03/2017 **Gaia-ESO survey and chemical evolution models** (talk)
Group meeting, Observatoire de la Côte d'Azur, Nice, France,
Nice, March 17, 2017
- 01/2017 **The chemical evolution of the Milky Way in the Gaia Era** (talk)
Workshop "Beyond the Solar Neighborhood: Entering into the Gaia Era"
Sexten Center for Astrophysics, Sexten, Italy, January 23-27, 2017
- 05/2016 **Modelling the chemical evolution of the Milky Way disk** (poster)
Dipartimento di Fisica, Università degli Studi di Trieste,
Trieste, May 13, 2016

Teaching experience

- 2018-2020 Co-supervisor of Bachelor Theses at Dipartimento di Fisica, Università degli Studi di Trieste
Students: A. Giammarino, A. Vasini, M. Esposito, M. Torsello, C. Gianolla
Main advisor: prof. F. Matteucci
- 2017-2020 Teaching Assistant at Dipartimento di Fisica, Università degli Studi di Trieste
Courses: Introduction to Astrophysics, Theoretical astrophysics, Evolution of stars and galaxies
Courses held by prof. F. Matteucci
- 2016-2017 Student Assistant at Dipartimento di Fisica, Università degli Studi di Trieste
Tutor for high-school students at "Stage Estivo di Fisica"
Main advisor: prof. M. Peressi

Languages

ITALIAN: Mother tongue
ENGLISH: Full professional (Certificate in Advanced English)
FRENCH, ANCIENT GREEK, LATIN: Basic

Computer skills

PROGRAMMING LANGUAGES: Fortran, C/C++, Python, IDL
OPERATING SYSTEMS: Linux, Windows, Macintosh
SOFTWARE: \LaTeX , Microsoft Office

Grants, prizes and honours

- 2021 Winner of the "Pietro Tacchini" Prize for the best Italian Ph.D. Thesis in Astronomy, promoted by Italian Astronomical Society (SAIt)
- 2021 Winner of the grant for Short Term Scientific Mission (STSM) - COST Action CA16117 (STSM to visit dr. C. Chiappini at AIP Potsdam in August 2021)
- SINCE 2021 Postdoctoral research fellowship (University of Bologna)
- 2020-2021 Postdoctoral research fellowship (SISSA)
- 2016-2019 PhD scholarship on merit basis (Università degli Studi di Trieste)
- A.A. 2015/2016 Merit prize for Master results (BCC)
- A.A. 2013/2014 Merit prize for Bachelor results (BCC)
- A.S. 2010/2011 National grant for outstanding achievements at high school

Affiliations

- SINCE 2021 International Astronomical Union (IAU), Junior Member
- SINCE 2020 Società Italiana di Fisica (SIF)
- SINCE 2019 Istituto Nazionale di Astrofisica (INAF Trieste)

Other professional activities

- Referee for Astronomy & Astrophysics
- Co-Organizing the seminars of the Asterochronometry Team at the University of Bologna (since 2021)
- Organizing the Journal Club at INAF Trieste (2018-2019)
- Contributing to outreach events at INAF Trieste and SISSA (e.g. Trieste Next,...)

I hereby authorize the treatment of my personal data according to art. 13 D. Lgs. 196/2003 and art. 13 European Union Regulation 2016/679.

Trieste, 1st October 2021