

# Curriculum Vitae

## Chiara Spiniello



### LANGUAGES

ITALIAN

ENGLISH

SPANISH

GERMAN

FRENCH

DUTCH

### Personal

Osservatorio Astronomico di Capodimonte,  
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### Skills:

- Good knowledge of IDL.
- Good familiarity with programs for visual analysis of FITS files (ds9, fv, Aladin, Qfits, TOPCAT).
- Basic knowledge of IRAF, Python, Mathematica, C++, fortran

### Education

- October 2013: PhD degree *cum laude* at the Kapteyn Astronomical Institute, Groningen, The Netherlands, Thesis: "*The Initial Mass Function in Early-Type Galaxies*", Advisors: L.V.E. Koopmans, S.C.Trager.
- July 2007: Master's Degree in Astrophysics and Space science, Federico II University of Naples, full marks and high honors (110/110 cum laude), Thesis: "*2-D kinematical mapping of early-type galaxies with integral field spectroscopy*", Prof. M. Capaccioli, Dr. G.Covone.
- March 2003: B.A. in Physics, Federico II University of Naples, full marks, Prof. S. Capozziello

### Scholarships

- 2009: Ubbo Emmius Scholarship for PhD research in the Faculty of Mathematics and Natural Sciences, Groningen.
- 2008: Summer scholarship at Tor Vergata University of Rome, within the VIRGO research group, Aug-Sept, Supervisor: V. Fafone.
- 2005: ERASMUS scholarship program at the University of La Laguna, Tenerife, Canarias Islands, Sept-Feb 2005-6, Advisor: L. Smaldone

### Past Academic Employment

- 2013-2016 MPA Postdoc Fellowship at the Max-Planck-Institut für Astrophysik (MPA), Garching bei München. Advisor: S. White

### Current Academic Employment

- May 2017 - today : Marie Skłodowska-Curie (Astrofit2) Fellowship at the Osservatorio Astronomico di Capodimonte, INAF, Naples, Italy. Sponsor: N.R.N. Napolitano

## **Awards, Honors and Distinctions**

- Special mention for the “Lorenzoni Price” by the Italian Astronomical Society for the excellence and high-impact in the extragalactic astrophysics sector, 2017.
  - Seal of excellence delivered by the European Commission for a proposal submitted under the Horizon 2020’s Marie Skłodowska-Curie actions (call:IF-2016)
  - Awarded a DARK-Carlsberg Foundation Fellow at the Niels Bohr Institute, University of Copenhagen, 2016.
  - Block Winter Award 2014 (ASPEN Winter Conference)
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## **Scientific interests and projects:**

- **Formation and evolution of galaxies** (the Stellar Initial Mass Function in red and dead massive galaxies, the internal structure of Early-Type Galaxies up to  $z \sim 1$ , ultra compact massive galaxies to constrain the “*in situ*” population of local massive galaxies, the haloes of central galaxies in clusters and the Intracluster light with discrete tracers)
  - **Cosmology** (cosmography with gravitational lensing time-delay)
  - **Unresolved stellar population in galaxies** (line indices analysis, single stellar population modeling)
  - **Strong gravitational lensing**
  - **Integral-field spectroscopy**
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## **International collaborations and Pi-ships**

- **PI of The Fornax Cluster VLT Spectroscopic Survey (FVSS):** *Collaborators: M. Arnaboldi, L., Coccato, M. Hilker, V. Pota, N. R. Napolitano, M. Spavone, M. Cantiello, C. Tortora, E. Iodice, M. Paolillo, R. D’Abrusco, R. F. Peletier, A. J. Romanowsky, G. van de Ven, P. Schipani.*
  - **PI of the X-Shooter Lens Survey (XLENS).** *Collaborators: L.V.E. Koopmans, S. Trager, O.Czoske, M. Barnabé, S. Vegetti, C. Conroy, T. Treu.*
  - **PI of the The KiDS Strongly lensed Quasar Detection project (KiDS-SQuaD)** *Collaborators: A. Agnello, N. R. Napolitano, A. V. Sergeyev, F. I. Getman, C. Tortora, M. Spavone, M. Bilicki, L. V. E. Koopmans, K. Kuijken, E. Bannikova, E. Petrillo.*
  - **CoI of the “Gotta catch ‘em all” Project - Search for strong gravitational lenses in wide-sky Surveys.** *Collaborators: C. Tortora, L. Marchetti, A. Agnello, N. R. Napolitano, A. V. Sergeyev, F. I. Getman, D. Scognamiglio, P. D’Ago, M.A. Raj, N. Roy*
  - **Member of** the H0 Lenses in COSMOGRAIL’s Wellspring Collaboration (H0LiCOW, PI: S.Suyu), of the Kilo Degree Survey (PI: K.Kuijken), the KiDS-ATLAS Bridging Survey (PI: N. Napolitano), The Large Synoptic Survey Telescope Corporation (LSST-italia, PI:A.Fontana)
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## **Observing Experience and Schools**

- VLT-ESO, X-shooter, Paranal Observatory, Chile, 2011
  - XXIII Canary Islands Winter School of Astrophysics, Puerto de la Cruz, Spain, Nov 2011
  - NOVA Fall School, The Netherlands, 3-7 Oct 2011
  - The Eighth NEON Observing School, Calar Alto, Spain, 17-27 June 2010
  - Teide Observatory, IAC-80 telescope, Tenerife, Canary Islands, Spain, 2006
  - Observing school at the Asiago Observatory, Italy, 2005
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## **Supervisory Experience**

- 2014 - 2016 Co-supervising of a master student at the Kapteyn Institute. Co-supervisors: S.C. Trager, Dr. M. Lyubenova. Student: G. Mensinga
  - 2016 - Today: Co-supervising of a PhD student at the INAF-Osservatorio di Capodimonte. Supervisor: N.R.Napolitano. Student: M.A. Raj
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## **Participation in Thesis Committees**

- PhD Thesis: N. Pastorello, Swinburne University, October 2015
  - Master Thesis: B. Reichardt, Macquarie University, September 2018
  - PhD Thesis: C.Pulsoni, MPE, October 2018 - defense foreseen for Summer 2019
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## **Outreach Activities**

- Public Lecture at the “The Arnhem Section of the Royal Dutch Society for Weather- and Astronomy, 19 December 2012
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## **Invited Talks, Public Talks and Contributions**

- Astro Seminars at INAF Osservatorio Astronomico di Padova , 17 Jan 2019, “The stellar Initial Mass Function is not universal”
- **Invited talk** at the Second Italy-Ukraine meeting in Astronomy, Institute of Astronomy and Department of Astronomy and Space Informatics of V.N. Karazin Kharkiv National University, Kharkiv, Ukraine, 25-27 September 2018: “Gotta catch’Em All: Strong gravitational lenses in KiDS and KABS”
- Talk at the meeting “VST in the era of the large sky surveys”, INAF Osservatorio Astronomico di Capodimonte (OAC), Naples, Italy, 5-8 June 2018: “Gotta catch’em all”.
- Talk at the EWASS2018 (S11), Liverpool, UK, 3-7 April 2018: “Strong gravitational lensing with KiDS: Exploring the mass distribution in ETGs”
- **Invited talk** at the LXI edition of the SAIt Italian Astrophysics National Congress, Padua, Italy, 12-15 September 2017: “Dark vs. Light in KiDS galaxies with Strong Lensing”.
- **Invited talk** at the Lorentz Workshop: “The Universal Problem of the Non-Universal IMF”, Leiden 5-9 Dec, 2016
- Talk at the conference “The Interplay between local and global processes in galaxies”, Cozumel, México, 11th-15th April, 2016: “ IMF gradients and Sodium abundance in M87 with MUSE”
- Talk at the mini-workshop at Space Telescope Science Institute, “The Stellar IMF at Low Masses: A Critical Look at Variations and Environmental Dependencies”, Baltimore, USA, June 29 - July 1, 2015: “Constraining the Low-Mass End Slope and the Cutoff Mass of the IMF from Gravitational Lensing and Stellar Population Analysis”
- Talk at the EWASS2015 (S3), Tenerife, Spain, 22 - 24 June 2015: “The XLENS Project: Constrain the Initial Mass Function and the Luminous & Dark Matter distribution in massive Early-Type Galaxies”
- Talk at the meeting “The universe of digital sky surveys“, OAC Naples, Italy, 27 November, 2014: “The low-mass end of the Initial Mass Function in massive ETGs”
- Talk at the IAU Symposium 311, “Galaxy Masses as Constraints of Formation Models”, Oxford UK, 23 July 2014: “XLENS: The low-mass end of the Initial Mass Function is not universal”
- **Invited Talk** at the National Astronomical Meeting (NAM), Portsmouth UK, Parallel Section “The Initial Mass Function of Galaxies: Myth & Facts”, 24 June 2014, “The stellar Initial Mass Function in early-type galaxies from a non-degenerate set of optical line indices”

- Astrophysics Colloquium, University of Oxford, 12 May 2014: “The XLENS Survey: Constraining the low-mass end and cut-off mass of the Initial Mass Function from lensing, dynamics and stellar population”
- Colloquium at the Dark Cosmology Center, Niels Bohr Institute, University of Copenhagen, 26 March 2014: “Constraining the low-mass end and cut-off mass of the Initial Mass Function”
- Talk at the ASPEN 2014 Winter Conference “Unveiling The Formation of Massive Galaxies - Theoretical and Observational Challenges”, 4 February 2014: “XLENS: The low-mass end of the Initial Mass Function is not universal”
- **Invited Talk** at the NOVA Network 1st meeting, Galaxies and Cosmology, Groningen, The Netherlands, 30 August 2013: “The XLENS Survey”
- Talk at the EWASS2013 Sp12), Turku FI, 12 July 2013: “XLENS: Constraining the Initial Mass Function and its lower cutoff mass from lensing, dynamics and stellar population”
- **Invited Talk** at the EWASS2013 (S4), Turku FI, 8-11 July 2013 : “The XLENS Survey”
- **Invited Talk** at the Lorentz Center Workshop: “Is the Stellar Initial Mass Function Universal?”, Leiden, The Netherlands, 28 November 2012: “XLENS: Do more massive ETGs have more dark matter or a nonuniversal IMF?”
- **Invited Talk** at the meeting “Galaxy formation under the magnifying glass of gravitational lensing workshop” Courmayeur, Valle d’Aosta, Italy, 17-21 June 2012, “XLENS: A new set of optical indicators to constrain the low-mass end of the IMF

## List of publications

### Chiara Spiniello

#### Refereed, accepted, first author:

- **Spiniello C.**, Sergeyev A., Marchetti L., et al., 2019, MNRAS, 485, 5086
- **Spiniello C.**, Agnello A., Sergeyev A., Anguita T., Rodríguez Ó., N.R. Napolitano, C. Tortora, 2019, MNRAS, 483, 3888
- **Spiniello C.**, Agnello A., Napolitano N.R., Sergeyev A.V., Getman F. I., Tortora C., Spavone M., and the KiDS Collaboration, 2018, MNRAS 480, 1163
- **Spiniello C.**, Napolitano N.R., Arnaboldi M., Tortora C., Coccato L., Capaccioli M., Gerhard O., Iodice E., Spavone M., Cantiello M., Peletier R., Paolillo M., 2018, MNRAS, 477, 1880
- **Spiniello C.**, Barnabè M., Koopmans L.V.E., Trager S.C., 2015, MNRAS, 452, L21
- **Spiniello C.**, Koopmans L.V.E., Trager S.C., Barnabè M., Treu T., Czoske O., Vegetti S., Bolton A., 2015, MNRAS, 452, 2434
- **Spiniello C.**, Napolitano N.R., Coccato L., Pota V., Romanowsky A.J., Tortora C., Covone G., Capaccioli M., 2015, 2015, MNRAS, 452, 99
- **Spiniello C.**, Trager S.C., Koopmans L.V.E., 2015, ApJ, 803, 87
- **Spiniello C.**, Trager S.C., Koopmans L.V.E., Conroy C., 2014 MNRAS, 438, 1483
- **Spiniello C.**, Trager S.C., Koopmans L.V.E., Chen Y.P., 2012, ApJ, 753, L32
- **Spiniello C.**, Koopmans L.V.E., Trager S.C., Czoske O., Treu T., 2011, MNRAS, 417, 3000

#### Refereed, accepted, Co-author:

- Sergeyev A, **Spiniello C.** et al, 2018, RNAAS, 2, 189
- Sarzi M, **Spiniello C.**, et al., 2018, MNRAS, 478, 4084
- Barnabè M., **Spiniello C.**, et al., 2013, MNRAS, 436, 253

- Nakoneczny S., et al., 2019, A&A, 624, A13
- Petrillo C. E., et al., 2019, MNRAS, 484, 3879
- Tortora et al., 2018, MNRAS, 481, 4728
- Romaniello M., et al., 2018, SPIE1, 10704, 1070416
- Pota et al., 2018, MNRAS, 481, 1744
- Suyu S. H., et al., 2017, MNRAS, 468, 2590
- Bonvin V., et al, 2017, MNRAS, 465, 4914
- Bonvin V., et al, 2017, 2017yCat..74654914B
- Sluse D., et al., 2017, MNRAS, 470, 4838
- Suyu S. H., et al., 2013, ApJL, 788, L35

Submitted:

- Spiniello et al., 2019c, submitted to MNRAS
- Khramtsov et al., 2019, submitted to A&A
- Agnello A, & **Spiniello C.**, 2018, arXiv:1805.11103

Non refereed

- Sergeyev A., **Spiniello C.** et. al, 2018, RNAAS, 2, 189
- **Spiniello C.** et al., 2018, vels.conf, 13
- **Spiniello C.**, 2016, ASSP, 42, 219
- **Spiniello C.**, Sarzi M. & Krajnovic D., 2016ilgp.confE.20S
- Barnabè M, **Spiniello C.** & Koopmans, L. V. E. 2015, IAU Symposium, 309, 77
- **Spiniello C.**, 2013 IAUS, 295, 221
- **Spiniello C.**, 2011, gafo.conf, 89P