

PERSONAL INFORMATION

Antonio Ragagnin

📍 INAF-Osservatorio di Astrofisica e Scienza dello Spazio di Bologna, Via Piero Gobetti 93/3, I-40129 Bologna, Italy

☎ +39 371 3366550

✉ antonio.ragagnin@inaf.it

🔗 aragagnin.github.io

Date of birth 5/11/1988 | Nationality Italian

WORK EXPERIENCES

01/08/2023 – 11/08/2023

Visiting Dr. Klaus Dolag at LMU (Munich)

Performed accuracy analysis of the GPU porting for the gravity and hydrodynamics physics solvers in the OpenGadget3 code.

01/04/2023 – Ongoing

Postdoc at INAF-OAS

Working with Dr. Massimo Meneghetti and Dr. Carlo Giocoli on the Euclid Mission project on planning, running, and analysing of zoom-in cosmological simulations for studies on gravitational lensing from substructures in galaxy clusters.

01/04/2022 – 31/04/2022

Visiting LMU (Munich) with grants HPC-Europa3 (HPC17YMAKH)

01/04/2021 – 31/03/2023

Postdoc at Università di Bologna

Work with Prof. Lauro Moscardini, Dr. Massimo Meneghetti and Dr. Carlo Giocoli on the impact of baryon physics in galaxy-galaxy strong lensing signal in the core of galaxy clusters.

I semester 2020/2021

Lab assistant

Foundation of HPC class of High Performance Computing SISSA/ICTP master

I semester 2021/2022

Lab assistant

Advanced lab. for programming in physics (Laboratorio di programmazione avanzata per la fisica) at Physics department of University of Trieste

01/04/2019 – 31/03/2021

Postdoc at INAF-OATS

Work with Dr. Giuliano Taffoni on improving scalability of high-resolution zoom-in hydrodynamic simulations of galaxy clusters.

01/01/2019 – 31/03/2019

Postdoc at Leibniz Supercomputing Centre (LRZ)

Performance testing of codes for hydrodynamic cosmological simulations on the new supercomputer (SuperMuc-NG) at LRZ (Leibniz Supercomputing Centre).

01/10/2014 – 31/12/2018

PhD fellowship

Ph.D. program as part of the International Max Planck Research School (IMPRS) on Astrophysics, in collaboration between Ludwig-Maximilians-Universität (LMU), LRZ supercomputing center, and the Excellence Cluster Universe (<https://www.universe-cluster.de/>).

11/06/2018 – 16/06/2018

Supervised intern Conradin Roffler (ETH Zurich) on the GPU porting of the cooling and stellar formation model in the Gadget3 code.

Other experiences

I worked from September 2007 to December 2007 as a junior system administrator for Sinterim Spa at Cimolai Spa, from March 2008 to July 2008 as a PHP programmer for Manifattura Web Srl, and from February 2014 to July 2014 as a Java programmer for ZConsultancies.

EDUCATION AND TRAINING

18/12/2018 PhD Title (cum laude)

Thesis "From the mass-concentration relation of haloes to GPUs and into the web: a guide on fully utilizing super computers for the largest, cosmological hydrodynamic simulations", at University Ludwig-Maximilians-Universität (LMU) München.

Repository: <https://edoc.ub.uni-muenchen.de/23521/>

21/11/2013 Master degree in Theoretical Physics (Grade: 110/110 cum laude)

University of Trieste

20/07/2011 Bachelor degree in Theoretical Physics (Grade: 110/110)

University of Trieste

PERSONAL SKILLS

Mother tongue Italian

Other languages

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
Self-evaluation:				
English	C1	C2	C1	C2
Deutsch	A1	A1	A1	A1

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
[Common European Framework of Reference for Languages](#)

Digital Skills Windows, Microsoft Office, Microsoft Excel, Linux, HPC, C/C++, Python, MPI, OpenMP, OpenACC, P-Gadget, SUBFIND, HTML, CSS, Javascript

CONFERENCES AND MEETINGS

- 26/19/2023 Talk "Feedback and resolution do not improve the low lensing signal of simulated cluster cores" @ online Yale seminar "DM on small scales", PI Priyanka Natarajan
- 31/07/2023 Talk "Velocity dependent SIDM effects on galaxy cluster strong-lensing signals" @ Munich Observatory (USM)
- 19/06/2023 – 30/06/2023 Self-interacting dark matter meeting (Pollica) talk "Velocity dependent SIDM effects on galaxy cluster strong-lensing signals"
- 02/2023 Talk @ Euclid Galaxy Clusters SWG meeting in Bologna
- 02/2023 INAF-OAS colloquium seminar "Strong-lensed galaxies in simulated and observed galaxy clusters"
- 24/01/2023 – 26/01/2023 Zooming PRIN workshop "A golden era for strong gravitational lensing: new data, modelling and applications", Milano
- 09/2023 Talk "Galaxies in the central regions of simulated galaxy clusters" @ CLUSTER3, Bologna
- 07/2022 Invited talk "Galaxies in the central regions of simulated galaxy clusters" @ RAS National Astronomy Meeting (NAM, University of Warwick, UK)
- 07/2022 Talk "Galaxies in the central regions of simulated galaxy clusters" @ Cosmology From Home
- 2020 NVIDIA virtual Hackaton @ CSC

- 2020 Invited talk "Bringing Zoom-In Initial Conditions of Cosmological Simulations on GPUs" @ OpenACC Summit (virtual)
- 01/2020 HydroSim meeting (hydrodynamic simulation meeting, Munich) @ Munich Observatory
- 2019 Talk "Gadget3 on GPUs with OpenACC" @ ParCo (Prague)
- 2018 Invited poster "Gadget3 (N-Body gravity + SPH) on GPUs" @ GPU Technology Conference (GTC, Munich)
- 2017 Invited poster "A web portal for large cosmological simulation data" @ EnviroInfo (Munich)
- 2017 EuroHack OpenACC workshop @ CSCS Lugano
- 2016 Poster "A multi node Barnes Hut solver on GPUs for Gadget3" @ Perspectives of GPU in science (Rome)
- 2016 Talk @ HydroSim workshop (Trieste)
- 2016 Talk "A web interface to federalize the outcome of large, cosmological, hydrodynamic simulations" @ Astronomical Data Analysis Software and Systems (ADASS, Trieste)
- 2015 Talk "Exploiting the Space Filling Curve Ordering of Particles in the Neighbour Search of Gadget3" @ International Conference on Parallel Computing (ParCo, Edinburgh)

REFEREE

- 2022 Referee for MNRAS
- 2022 Referee for Astronomy & Computing

COLLABORATIONS

Member Euclid Consortium
 Member Clusters of Galaxies Science Working Group, Euclid
 Member Mass-Observable Relation Key-Project, Euclid
 Member Dianoga simulations (PIs Klaus Dolag, Elena Rasia, Stefan Borgani)
 Member Magneticum (PI Klaus Dolag)
 Member Darkium on Self-Interacting Dark Matter (PI Moritz Fisher)
 Member of OpenGadget3 developers (PI Klaus Dolag)

COMPUTING RESOURCES

- 08/2023 PI CINECA Iskra C (IsCb1 openaccg)
- 08/2023 PI EuroHPC Benchmark Call (EHPC-BEN-2023B08-013) 3500 Leonardo Booster node hours
- 2023 PI PLEIADI Bologna project "SIDM vs CDM 2" 400 000 CPU hours
- 2022 Collaborator CINECA account LEAP 041 (PI Dr. Milena Valentini) 100 000 CPU hours
- 2023 Collaborator INAF computing time account INA23 C9B06 (PI Dr. Elena Rasia) 550 000 CPU hours
- 2022 PI PLEIADI Trieste project "SIDM vs CDM" 466 000 CPU hours
- 2022 Collaborator CINECA Iskra B account IsB24 HRCLUS (PI Dr. Luca Tornatore) 704 000 CPU hours
- 2021 Collaborator INAF computing time INA21 C8A63 (PI Dr. Tiago Castro) 480 000 CPU hours
- 2021 Collaborator CINECA Iskra B IsB22 ECOCLUS (PI Dr. Giuseppe Murante) 750 000 CPU hours
- 2020 Collaborator INAF computing time INA20 C7A68 (PI Dr. Elena Rasia) 400 000 CPU hours
- 2019 Collaborator CINECA Iskra B IsB18 SimClus (PI Prof. Stefano Borgani) 500 000 CPU hours
- 2017 Collaborator INAF computing time INA17 C5A46 (PI Prof. Stefano Borgani) 186 000 CPU hours

PUBLICATIONS

- [1] G. Granata, P. Bergamini, C. Grillo, M. Meneghetti, A. Mercurio, U. Meštrić, **A. Ragagnin**, P. Rosati, G. B. Caminha, L. Tortorelli, and E. Vanzella. "Exploring the low-mass regime of galaxy-scale strong lensing: Insights into the mass structure of cluster galaxies". In: *Astronomy and Astrophysics* 679, A124 (Nov. 2023), A124.
- [2] Euclid Collaboration et al. "Euclid preparation TBD. The effect of baryons on the Halo Mass Function". In: *arXiv e-prints*, arXiv:2311.01465 (Oct. 2023), arXiv:2311.01465. arXiv: 2311.01465 [astro-ph.CO].

- [3] Moritz S. Fischer, Lenard Kasselmann, Marcus Brüggen, Klaus Dolag, Felix Kahlhoefer, **Antonio Ragagnin**, Andrew Robertson, and Kai Schmidt-Hoberg. “Cosmological and idealised simulations of dark matter haloes with velocity-dependent, rare and frequent self-interactions”. In: *arXiv e-prints*, arXiv:2310.07750 (Oct. 2023), arXiv:2310.07750. arXiv: 2310.07750 [astro-ph.CO].
- [4] Giovanni Granata, Pietro Bergamini, Claudio Grillo, Massimo Meneghetti, Amata Mercurio, Uros Meštrić, **Antonio Ragagnin**, Piero Rosati, Gabriel Bartosch Caminha, Luca Tortorelli, and Eros Vanzella. “Exploring the low-mass regime of galaxy-scale strong lensing: Insights into the mass structure of cluster galaxies”. In: *arXiv e-prints*, arXiv:2310.02310 (Oct. 2023), arXiv:2310.02310. arXiv: 2310.02310 [astro-ph.GA].
- [5] Massimo Meneghetti, Weiguang Cui, Elena Rasia, Gustavo Yepes, Ana Acebron, Giuseppe Angora, Pietro Bergamini, Stefano Borgani, Francesco Calura, Giulia Despali, Carlo Giocoli, Giovanni Granata, Claudio Grillo, Alexander Knebe, Andrea V. Macciò, Amata Mercurio, Lauro Moscardini, Priyamvada Natarajan, **Antonio Ragagnin**, Piero Rosati, and Eros Vanzella. “A persistent excess of galaxy-galaxy strong lensing observed in galaxy clusters”. In: *Astronomy and Astrophysics* 678, L2 (Oct. 2023), p. L2. arXiv: 2309.05799 [astro-ph.CO].
- [6] Atulit Srivastava, Weiguang Cui, Massimo Meneghetti, Romeel Dave, Alexander Knebe, **Antonio Ragagnin**, Carlo Giocoli, Francesco Calura, Giulia Despali, Lauro Moscardini, and Gustavo Yepes. “The Three Hundred: $M_{\text{sub}} - V_{\text{circ}}$ relation”. In: *arXiv e-prints*, arXiv:2309.06187 (Sept. 2023), arXiv:2309.06187. arXiv: 2309.06187 [astro-ph.GA].
- [7] M. Angelinelli, S. Ettori, K. Dolag, F. Vazza, and **A. Ragagnin**. “Redshift evolution of the baryon and gas fraction in simulated groups and clusters of galaxies”. In: *Astronomy and Astrophysics* 675, A188 (July 2023), A188. arXiv: 2305.09733 [astro-ph.CO].
- [8] **A. Ragagnin**, A. Fumagalli, T. Castro, K. Dolag, A. Saro, M. Costanzi, and S. Bocquet. “Dependency of high-mass satellite galaxy abundance on cosmology in Magneticum simulations”. In: *Astronomy and Astrophysics* 675, A77 (July 2023), A77. arXiv: 2110.05498 [astro-ph.CO].
- [9] Martin W. Sommer, Tim Schrabback, **Antonio Ragagnin**, and Robert Rockenfeller. “Weak lensing mass bias and the alignment of center proxies”. In: *arXiv e-prints*, arXiv:2306.13187 (June 2023), arXiv:2306.13187. arXiv: 2306.13187 [astro-ph.CO].
- [10] Euclid Collaboration et al. “Euclid preparation. XXIV. Calibration of the halo mass function in $\Lambda(\nu)$ CDM cosmologies”. In: *Astronomy and Astrophysics* 671, A100 (Mar. 2023), A100. arXiv: 2208.02174 [astro-ph.CO].
- [11] Milena Valentini, Klaus Dolag, Stefano Borgani, Giuseppe Murante, Umberto Maio, Luca Tornatore, Gian Luigi Granato, Cinthia Ragone-Figueroa, Andreas Burkert, **Antonio Ragagnin**, and Elena Rasia. “Impact of H_2 -driven star formation and stellar feedback from low-enrichment environments on the formation of spiral galaxies”. In: *Monthly Notices of the RAS* 518.1 (Jan. 2023), pp. 1128–1147. arXiv: 2207.13710 [astro-ph.GA].
- [12] Massimo Meneghetti, **Antonio Ragagnin**, Stefano Borgani, Francesco Calura, Giulia Despali, Carlo Giocoli, Gian Luigi Granato, Claudio Grillo, Lauro Moscardini, Elena Rasia, Piero Rosati, Giuseppe Angora, Luigi Bassini, Pietro Bergamini, Gabriel B. Caminha, Giovanni Granata, Amata Mercurio, Robert Benton Metcalf, Priyamvada Natarajan, Mario Nonino, Giada Venusta Pignataro, Cinthia Ragone-Figueroa, Eros Vanzella, Ana Acebron, Klaus Dolag, Giuseppe Murante, Giuliano Taffoni, Luca Tornatore, Luca Tortorelli, and Milena Valentini. “The probability of galaxy-galaxy strong lensing events in hydrodynamical simulations of galaxy clusters”. In: *Astronomy and Astrophysics* 668, A188 (Dec. 2022), A188. arXiv: 2204.09065 [astro-ph.CO].

- [13] Moritz S. Fischer, Marcus Brüggen, Kai Schmidt-Hoberg, Klaus Dolag, Felix Kahlhoefer, **Antonio Ragagnin**, and Andrew Robertson. “Cosmological simulations with rare and frequent dark matter self-interactions”. In: *Monthly Notices of the RAS* 516.2 (Oct. 2022), pp. 1923–1940. arXiv: 2205.02243 [astro-ph.CO].
- [14] **A. Ragagnin**, S. Andreon, and E. Puddu. “Simulation view of galaxy clusters with low X-ray surface brightness”. In: *Astronomy and Astrophysics* 666, A22 (Oct. 2022), A22. arXiv: 2208.02827 [astro-ph.CO].
- [15] **Antonio Ragagnin**, Massimo Meneghetti, Luigi Bassini, Cinthia Ragone-Figueroa, Gian Luigi Granato, Giulia Despali, Carlo Giocoli, Giovanni Granata, Lauro Moscardini, Pietro Bergamini, Elena Rasia, Milena Valentini, Stefano Borgani, Francesco Calura, Klaus Dolag, Claudio Grillo, Amata Mercurio, Giuseppe Murante, Priyamvada Natarajan, Piero Rosati, Giuliano Taffoni, Luca Tornatore, and Luca Tortorelli. “Galaxies in the central regions of simulated galaxy clusters”. In: *Astronomy and Astrophysics* 665, A16 (Sept. 2022), A16. arXiv: 2204.09067 [astro-ph.CO].
- [16] V. Marra, T. Castro, D. Camarena, S. Borgani, and **A. Ragagnin**. “The BEHOMO project: Λ Lemaitre-Tolman-Bondi N-body simulations”. In: *Astronomy and Astrophysics* 664, A179 (Aug. 2022), A179. arXiv: 2203.04009 [astro-ph.CO].
- [17] Moritz S. Fischer, Marcus Brüggen, Kai Schmidt-Hoberg, Klaus Dolag, **Antonio Ragagnin**, and Andrew Robertson. “Unequal-mass mergers of dark matter haloes with rare and frequent self-interactions”. In: *Monthly Notices of the RAS* 510.3 (Mar. 2022), pp. 4080–4099. arXiv: 2109.10035 [astro-ph.CO].
- [18] I. Marini, S. Borgani, A. Saro, G. L. Granato, C. Ragone-Figueroa, B. Sartoris, K. Dolag, G. Murante, **A. Ragagnin**, and Y. Wang. “Velocity dispersion of brightest cluster galaxies in cosmological simulations”. In: *Monthly Notices of the RAS* 507.4 (Nov. 2021), pp. 5780–5795. arXiv: 2109.00223 [astro-ph.GA].
- [19] S. Andreon, C. Romero, F. Castagna, **A. Ragagnin**, M. Devlin, S. Dicker, B. Mason, T. Mroczkowski, C. Sarazin, J. Sievers, and S. Stanchfield. “Thermodynamic evolution of the $z = 1.75$ galaxy cluster IDCS J1426.5+3508”. In: *Monthly Notices of the RAS* 505.4 (Aug. 2021), pp. 5896–5909. arXiv: 2106.11327 [astro-ph.CO].
- [20] Moritz S. Fischer, Marcus Brüggen, Kai Schmidt-Hoberg, Klaus Dolag, Felix Kahlhoefer, **Antonio Ragagnin**, and Andrew Robertson. “N-body simulations of dark matter with frequent self-interactions”. In: *Monthly Notices of the RAS* 505.1 (July 2021), pp. 851–868. arXiv: 2012.10277 [astro-ph.CO].
- [21] **Antonio Ragagnin**, Alexandro Saro, Priyanka Singh, and Klaus Dolag. “Cosmology dependence of halo masses and concentrations in hydrodynamic simulations”. In: *Monthly Notices of the RAS* 500.4 (Jan. 2021), pp. 5056–5071. arXiv: 2011.05345 [astro-ph.CO].
- [22] I. Marini, A. Saro, S. Borgani, G. Murante, E. Rasia, K. Dolag, W. Lin, N. R. Napolitano, **A. Ragagnin**, L. Tornatore, and Y. Wang. “On the phase-space structure of galaxy clusters from cosmological simulations”. In: *Monthly Notices of the RAS* 500.3 (Jan. 2021), pp. 3462–3480. arXiv: 2007.05199 [astro-ph.CO].
- [23] L. Bassini, E. Rasia, S. Borgani, G. L. Granato, C. Ragone-Figueroa, V. Biffi, **A. Ragagnin**, K. Dolag, W. Lin, G. Murante, N. R. Napolitano, G. Taffoni, L. Tornatore, and Y. Wang. “The DIANOGA simulations of galaxy clusters: characterising star formation in protoclusters”. In: *Astronomy and Astrophysics* 642, A37 (Oct. 2020), A37. arXiv: 2006.13951 [astro-ph.GA].
- [24] **Antonio Ragagnin**, Klaus Dolag, Mathias Wagner, Claudio Gheller, Conradin Roffler, David Goz, David Hubber, and Alexander Arth. “Gadget3 on GPUs with OpenACC”. In: *arXiv e-prints*, arXiv:2003.10850 (Mar. 2020), arXiv:2003.10850. arXiv: 2003.10850 [astro-ph.IM].

- [25] David Goz, Georgios Ieronymakis, Vassilis Papaefstathiou, Nikolaos Dimou, Sara Bertocco, Francesco Simula, **Antonio Ragagnin**, Luca Tornatore, Igor Coretti, and Giuliano Taffoni. "Performance and energy footprint assessment of FPGAs and GPUs on HPC systems using Astrophysics application". In: *arXiv e-prints*, arXiv:2003.03283 (Mar. 2020), arXiv:2003.03283. arXiv: 2003.03283 [astro-ph.IM].
- [26] E. Rasia, L. Bassini, M. Valentini, V. Biffi, S. Borgani, K. Dolag, G. L. Granato, G. Murante, **A. Ragagnin**, C. Ragone-Figueroa, G. Taffoni, and L. Tornatore. "Star formation rate in simulated clusters". In: *Mem. Societa Astronomica Italiana* 91 (Jan. 2020), p. 332.
- [27] C. Chaitra, S. Bertocco, M. Molinaro, S. Molinari, **A. Ragagnin**, and G. Taffoni. "Exposing SED Models And Snapshots Via VO Simulation Artefacts". In: *Astronomical Data Analysis Software and Systems XXIX*. Ed. by R. Pizzo, E. R. Deul, J. D. Mol, J. de Plaa, and H. Verkouter. Vol. 527. Astronomical Society of the Pacific Conference Series. Jan. 2020, p. 363.
- [28] S. Bertocco, D. Goz, L. Tornatore, **A. Ragagnin**, G. Maggio, F. Gasparo, C. Vuerli, G. Taffoni, and M. Molinaro. "INAF Trieste Astronomical Observatory Information Technology Framework". In: *Astronomical Data Analysis Software and Systems XXIX*. Ed. by R. Pizzo, E. R. Deul, J. D. Mol, J. de Plaa, and H. Verkouter. Vol. 527. Astronomical Society of the Pacific Conference Series. Jan. 2020, p. 303. arXiv: 1912.05340 [astro-ph.IM].
- [29] D. Goz, G. Ieronymakis, V. Papaefstathiou, N. Dimou, S. Bertocco, **A. Ragagnin**, L. Tornatore, G. Taffoni, and I. Coretti. "Direct N-body application on low-power and energy-efficient parallel architectures". In: *arXiv e-prints*, arXiv:1910.14496 (Oct. 2019), arXiv:1910.14496. arXiv: 1910.14496 [cs.PF].
- [30] **Antonio Ragagnin**, Klaus Dolag, Lauro Moscardini, Andrea Biviano, and Mauro D'Onofrio. "Dependency of halo concentration on mass, redshift and fossilness in Magneticum hydrodynamic simulations". In: *Monthly Notices of the RAS* 486.3 (July 2019), pp. 4001–4012. arXiv: 1810.08212 [astro-ph.CO].
- [31] **A. Ragagnin**, K. Dolag, V. Biffi, M. Cadolle Bel, N. J. Hammer, A. Krukau, M. Petkova, and D. Steinborn. "A web portal for hydrodynamical, cosmological simulations". In: *Astronomy and Computing* 20 (July 2017), pp. 52–67. arXiv: 1612.06380 [astro-ph.IM].
- [32] Alberto Ragagnin. "Remarks on a rumor propagation model". In: *arXiv e-prints*, arXiv:1611.09222 (Nov. 2016), arXiv:1611.09222. arXiv: 1611.09222 [math.CA].
- [33] Nicolay Hammer, Ferdinand Jamitzky, Helmut Satzger, Momme Allalen, Alexander Block, Anupam Karmakar, Matthias Brehm, Reinhold Bader, Luigi Iapichino, **Antonio Ragagnin**, Vasilios Karakasis, Dieter Kranzlmüller, Arndt Bode, Herbert Huber, Martin Kühn, Rui Machado, Daniel Grünewald, Philipp V. F. Edelmann, Friedrich K. Röpke, Markus Wittmann, Thomas Zeiser, Gerhard Wellein, Gerald Mathias, Magnus Schwörer, Konstantin Lorenzen, Christoph Federrath, Ralf Klessen, Karl-Ulrich Bamberg, Hartmut Ruhl, Florian Schornbaum, Martin Bauer, Anand Nikhil, Jiaxing Qi, Harald Klimach, Hinnerk Stüben, Abhishek Deshmukh, Tobias Falkenstein, Klaus Dolag, and Margarita Petkova. "Extreme Scale-out SuperMUC Phase 2 - lessons learned". In: *arXiv e-prints*, arXiv:1609.01507 (Sept. 2016), arXiv:1609.01507. arXiv: 1609.01507 [cs.DC].
- [34] **Antonio Ragagnin**, Nikola Tchipev, Michael Bader, Klaus Dolag, and Nicolay J. Hammer. "Exploiting the Space Filling Curve Ordering of Particles in the Neighbour Search of Gadget3". In: *Advances in Parallel Computing*. May 2016, pp. 411–420. arXiv: 1810.09898 [astro-ph.IM].
- [35] Paramita Barai, Pierluigi Monaco, Giuseppe Murante, **Antonio Ragagnin**, and Matteo Viel. "Gas Outflow Properties in Cosmological Simulations of Galaxies/ Implementation of Kinetic AGN Feedback in GADGET-3". In: *Cosmological Simulations: From Galaxies to Large Scales*. June 2015, 7, p. 7.

- [36] G. Murante, P. Barai, S. Borgani, P. Di Cerbo, A. Curir, K. Dolag, D. Goz, P. Monaco, **A. Ragagnin**, L. Tornatore, and et al. "Simulating disk galaxies with a novel sub-grid prescription". In: *Cosmological Simulations: From Galaxies to Large Scales*. June 2015, 6, p. 6.
- [37] Paramita Barai, Pierluigi Monaco, Giuseppe Murante, **Antonio Ragagnin**, and Matteo Viel. "Galactic outflow and diffuse gas properties at $z \geq 1$ using different baryonic feedback models". In: *Monthly Notices of the RAS* 447.1 (Feb. 2015), pp. 266–286. arXiv: 1411.1409 [astro-ph.GA].

Autorizzo il trattamento dei miei dati personali presenti nel CV ai sensi dell'art. 13 d. lgs. 30 giugno 2003 n. 196 - "Codice in materia di protezione dei dati personali" e dell'art. 13 GDPR 679/16 - "Regolamento europeo sulla protezione dei dati personali".

Le informazioni contenute nel presente "curriculum vitae et studiorum" sono rese sotto la personale responsabilità del sottoscritto, ai sensi degli articoli 46 e 47 del Decreto del Presidente della Repubblica 28 dicembre 2000, numero 445, e successive modifiche ed integrazioni, consapevole della responsabilità penale prevista dall'articolo 76 del medesimo Decreto per le ipotesi di falsità in atti e dichiarazioni mendaci

Data e Firma: