

# STEPHANIE ESCOFFIER

## CNRS Research Professor in cosmology

Cosmologist at CNRS and active member of the DESI and Euclid collaborations, I specialize in studying dark energy and dark matter, two of the most compelling mysteries of the Universe. My research focuses on galaxy clustering, cosmic voids, and multi-probe correlations (CMB and gravitational waves) to deepen our understanding of the large-scale structure of the cosmos. I have also contributed to developing and validating covariance matrices, which play a crucial role in refining cosmological parameter inference.



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## RESEARCH POSITION

- 2017-present **Research Professor** (Directrice de Recherche CNRS), CPPM
- 2006-2017 **Associate Research Professor** (Chargée de Recherche CNRS), CPPM
- 2004-2006 **Postdoctoral Fellow** at CPPM (Marseille, France)
- 2002-2003 **Postdoctoral Fellow** at CETP (now LPP), (Vélizy, France)

## EDUCATION

- 2012 **Habilitation à Diriger des Recherches (HDR)**, Aix Marseille University (AMU)
- 1998-2001 **PhD in Physics**, Paris VII University
- 1995-1998 **MSc in Physics**, Paris VII University
- 1992-1995 **BSc in Physics**, Paris VII University

## WORK EXPERIENCE & SCIENTIFIC COLLABORATIONS

- since 2010 **Cosmology: BOSS (2010-2014), eBOSS (2014-2019), Dark Energy Spectroscopic Instrument (2021-2026), Euclid space mission (ESA, 2023-2030), LISA (2034-)**  
*Cosmological constraints using galaxy clustering and cosmic voids (Covariance matrix, Alcock-Paczynski test, Redshift Space Distortions, X-correlation with CMB, void lensing), color selection, redshift reconstruction*
- 2003-2013 **Neutrino astronomy: ANTARES, KM3NeT**  
*Constraints on neutrino flux from relativistic magnetic monopoles, Gamma-ray bursts (GRB), marine bioluminescence studies, online trigger, time calibration of PMTs*
- 2002-2003 **Earth's magnetosphere: Cluster II space mission (ESA, 2000-2020)**  
*Development of the data processing and visualization code for the WHISPER instrument*
- 1998-2001 **PhD: Compton polarimeter at Jefferson Lab**  
*Precise measurement of the electron beam polarization for GeP and N-Δ experiments, CEA IRFU DPhN*

## AWARDS & GRANTS

- Awarded for **La Science taille XX Elles** (Women and Science association) - 2023 Marseille edition
- “La Recherche magazine” Award 2014 - **Special Prize of the Jury**
- PI of the CNES/Euclid CPPM (2018-2026), PI of PNCG/Euclid-France (2022-2024), Co-I of the ANR eBOSS (2016-2021), PI of ANR OMEGA (2011-2015), Co-PI of the Aix-Marseille University grant “AAMIS” (2009-2010)

## LEADERSHIP POSITIONS IN INTERNATIONAL COLLABORATIONS

Current member of the DESI collaboration (participant), Euclid Consortium (builder), LISA et Roman (Science Collaboration et PIT Galaxy Redshift Survey).

### Euclid Consortium

- Member of the Steering Committee of the **Euclid National Observation Service** (since 2024)
- **Euclid France Coordinator** (and IN2P3 Euclid Lead) (since 2021)
- Member of the **Euclid Consortium Publication Group** (ECPG) for Data Release (2019-2025)
- Member of the Euclid-France Communication Team (since 2017)
- Co-coordinator of the Euclid France Clustering Coordination Group (since 2016)
- Lead of the “**Additional Probes**” **Work Package** for the Galaxy Clustering SWG (2015-2017)

### DESI Collaboration

- Member of the **DESI Membership Committee** (since 2024)
- Member of the **DESI Meetings Committee** (2019–2020 & 2022–2023)
- Member of the **DESI Publication Board** (2020-2024)
- Member of the **DESI Speakers Bureau** (2020-2021)
- DESI Support Observer

### Other Collaborations

- Member of the EDI (Equity, Diversity, and Inclusion) Working Group for **WST** (since 2025)
- Member of the **SDSS Science Collaboration Council (CoCo)** (2017-2022)
- CNRS Correspondent for the WPN "User Support and Impact Assessment" WP in KM3NeT Preparatory Phase (FP7) (2008–2009)
- Member of the Steering Committee for WP9 "Associated Sciences" in KM3NeT Design Study (FP6) (2006–2008)

## COMMITTEES AND ADVISORY BOARDS

### Scientific & Strategic Advisory Roles

- Member of the **Scientific Advisory Committee (SAC)**, ApPEC (2024–present)
- Member of the **Scientific Advisory Committee (CSI)**, CNRS/IN2P3 (2019-2022)
- Member of the **Scientific Advisory Committee (CS)**, AMU Science Department (2016-2021)
- Member of the **Scientific Council (CS)**, LAPP (2021-2025)
- Member of the **Scientific Council (CS)**, CPPM (2010-2015, 2021-2024 & 2025-2028)
- Member of the Research Board, Institute for Universe Physics (IPhU) (2020-2023)
- Co-coordinator of the IPhU Work Package "Galaxies and Cosmology" (2020-2023)

## Evaluation & Expert Committees

- Member of the CERES **Thematic Group on Gravity, Cosmology, and Metrology**, CNES (2024–present)
- **Member of Section 01, CNRS National Committee** (2022-2023)
- Member of the HCERES Expert committee, IJCLab evaluation (2025)
- Member of the HCERES Expert committee, LPNHE evaluation (2023)
- Expert evaluator, Swiss National Science Foundation (2025)
- Expert evaluator, MSCA Postdoctoral Fellowships (2024 & 2025)
- **Jury member for the Charles Fabry and Yvonne Choquet-Bruhat Thesis Prize** (since 2025)
- **Jury member for the SFP Thesis Prize** (since 2023)
- **Jury member for the Joliot-Curie Prize (SFP)** (since 2023)
- Selection committee member for Researcher positions (Aix Marseille Univ in 2014, 2015, 2022, 2023, CEA/IRFU in 2024, Université Paris Cité in 2024)

## Institutional Commitments

- Head for the **Division of Particles & Fields**, French Physical Society (SFP) (2024-2025)
- Member of the Executive Board, Division of Particles & Fields, SFP (since 2014)
- Member of the Executive Board, Women and Physics Commission, SFP (since 2022)
- Member of the Governing Board (CA), SFP (2018–2020)
- Member of the **Laboratory Council (CU)**, CPPM (2018–2023 & 2008–2011)
- Scientific expert for the Project Support Unit (CSP), CPPM (2009–2011)
- Laser Safety Officer, CPPM (2006–2022)

## MENTORING & REVIEWING ACTIVITES

- **Advising 6 post-doctoral fellows**: Pauline Vielzeuf (2021-2025), Sylvain Gouyou-Beauchamps (2022), Pierros Ntelis (2018-2020), Adam Hawken (2017-2029), Alice Pisani (2014-2017), Violeta Gonzalez-Perez (2012-2013)
- **Supervised or co-supervised 10 PhD students**: Urwa Shoaib (2026-2028, co-superv), Sarah Ferraiuolo (2023-2026, Dual PhD program), Lucas Saunière (2022-2025, co-superv), Simone Sartori (2022-2025), Vincent Duret (2021-2024, co-superv), Renan Isquierdo Boschetti (2020-2023, co-superv), Romain Paviot (2018-2021, co-superv), Sylvain Gouyou-Beauchamps (2018-2021, co-superv), Marie Aubert (2017-2020), Nicolas Picot-Clemente (2007-2010)
- Supervised 15 undergraduate students
- Member of 19 PhD defense committees and 3 HDR committees (including 12 as external referee)

## ORGANIZATION OF SCIENTIFIC MEETINGS

Organization of 14 conferences and workshops, 3 schools, 30 collaboration meetings. The Scientific/Local Organization Committee (SOC/LOC) over the last 3 years:

- 2026
  - SOC, **Journée de la Division SFP 2026**: Le vide, 31 mars 2026 – Paris
- 2025
  - SOC, **Journées Euclid France 2025**, 17-19 novembre 2025 – Strasbourg
  - SOC, **Ecole Les Houches on Dark Energy**, 6 juillet à 2 août 2025 – Les Houches
  - SOC, **Journée de la Division SFP 2025**: Astroparticules, 20 mars 2025 – Paris
  - SOC, **Journées Euclid France 2024**, 7-9 janvier 2025 – Saclay
- 2024
  - **SOC/LOC, Joint Euclid-Rubin France Workshop on DDP**, 5 décembre 2024 – Lyon
  - **LOC, DESI Collaboration meeting**, 8-12 juillet 2024 – Marseille
  - **SOC, Journée de la Division SFP 2024** : La Matière Noire, 21 mars 2024 – Paris
  - **SOC, Journées Euclid France 2023**, 24-26 janvier 2024 – Lyon
  - **SOC, Euclid-France Workshop on Clusters**, 23-24 janvier 2024 – Lyon
- 2023
  - SOC, conférence internationale « **Debating the potential of machine learning in astronomical surveys** », 27 nov-1 dec 2023 – Paris et New-York

- SOC , **Journée de la Division SFP 2023** : Champs et particules, la crise de la cinquantaine ?, 10 juillet 2023 – Paris
- Comité exécutif d'organisation des **150 ans de la SFP**, 2023
- International Advisory Committee (IAC) de **XVe International School of Cosmology**, 23-29 avril 2023 – Cargèse
- LOC du **Euclid XCMB SWG meeting**, mars 2023 – Marseille

## DISSEMINATION AND OUTREACH

- Scientific expert for Full dome shows “Hazelnuts” (2023), “GranPa & Zoe: mission light” (2021) and the immersive Virtual Reality “Cosmic Tour VR” application (2018)
- 17 conferences for the general public or school classes
- Interviews for France Inter (2023), France Culture (2020, 2023), Journal du CNRS (2018, 2023), Epsilon magazine (2023), Radio Alter Nantes (2020), Radio Grenouille (2020), « Pour la Science » magazine (2016, 2020)
- Author/Contributor to Reflets de la Physique (2023, 2026), Pour la Science magazine (2016, 2020)
- Participation in the Euclid launch live (youtube, 2023) and the Euclid Press Tour (Cannes, 2023)

## CONFERENCE TALKS

### Invited

1. **S. Escoffier** (2024, Oct). *Cosmological Surveys: What They Reveal About the Universe*, Invited talk at the colloque Tianguan International Research Project, Frejus, France
2. **S. Escoffier** (2021, June). *Cosmology from spectroscopic galaxy surveys*, , Invited talk at the Workshop Massively Parallel Large Area Spectroscopy from Space, done in remote
3. **S. Escoffier** (2020, Jan). *Cosmology with cosmic voids*, , Invited talk at the Theory meeting experiments Conference (TMEX 2020), Quy Nom, Vietnam
4. **S. Escoffier** (2013, Apr). *Monopole searches with the ANTARES telescope*, , Invited talk at the Exotic Physics with Neutrino Telescopes (EPNT 2013), Marseille, France
5. **S. Escoffier** (2009, May). *Gamma-Ray Bursts with the ANTARES neutrino telescope*, , Invited talk at the Workshop on Gravitational Waves and High Energy Neutrinos (GWHEN 2009), Paris, France
6. **S. Escoffier** (2008, Jan). *Neutrino astronomy with ANTARES*, , Invited talk at the France-China Particle Physics Laboratory (FCPPL 2008), Marseille, France

### Oral communications

1. **S. Escoffier** (2025, Juil), *Euclid Legacy Science prospects*, EPS-HEP 2025 international Conference, Marseille
2. **S. Escoffier** (2025, Juil), *DESI-II*, Congrès Général 2025 de la SFP, Troyes
3. **S. Escoffier** (2024, May), *Status of the Euclid mission in flight*, GDR CoPhy, Lyon, <https://indico.ijclab.in2p3.fr/event/10428/timetable/#20240521>
4. **S. Escoffier** (2024, Feb), *Experience with Winlight for Spectrographs*, Spec-S5 Instrumentation Workshop, Chicago, Feb 2024
5. **S. Escoffier** (2022, Dec), *Euclid-France workshop: assuring DR1 key projects, science, lead positions*, Symposium Euclid-France 2022, Paris
6. **S. Escoffier** (2022, Nov), *The Euclid mission: status and prospects*, Colloque National Action Dark Energy, Marseille
7. **S. Escoffier** (2019, Dec), *Future ground-based redshift galaxy surveys: DESI and MSE*, Prospectives IN2P3 du Groupe de Travail 05, Grenoble
8. **S. Escoffier** (2018, Oct), *Covariance matrix from jackknife resampling on mock catalogues*, DESI Collaboration meeting 2018, Barcelona, Spain
9. **S. Escoffier** (2016, Nov), *Jackknife resampling technique on mocks*, eBOSS/DESI France meeting, Paris
10. **S. Escoffier** (2016, June). *Covariance matrix from jackknife resampling on mock catalogues*, Euclid Consortium Annual Meeting 2016, Lisboa, Portugal

11. **S. Escoffier** (2012, Dec). The Alcock-Paczynski test on close pairs of galaxies, BOSS collaboration meeting, Pittsburgh, US
12. **S. Escoffier** (2012, June). The ELG target *selection with the BOSS survey*, Annual meeting of the French Society of Astronomy and Astrophysics (SF2A), Nice, France et Proceedings arXiv.1301.2461
13. **S. Escoffier** (2012, Jan). *A measure of dark energy with pairs of galaxies*, BOSS collaboration meeting, New York, US
14. **S. Escoffier** (2011, August). *Status of the ANTARES Neutrino Telescope*, TeV Particle Astrophysics Conference (TeVPA 2011), Stockholm, Sweden
15. **S. Escoffier** (2011, March). *ELG simulated data*, BOSS collaboration meeting, Cloudcroft, US
16. **S. Escoffier** (2007, July). *The ANTARES detector: background sources and effects on detector performance*, International Cosmic Ray Conference (ICRC 2007), Merida, Mexico.
17. **S. Escoffier** (2000, Dec): *Compton polarimetry at JLab. Hall A: preliminary results during the N-Δ experiment*, Meeting of the Division of Nuclear Physics, American Physical Society (APS), Williamsburg, VA, USA.

## Seminars

- **S. Escoffier** (2024, May), *Status of the Euclid mission*, Observatoire de Paris, Meudon
- **S. Escoffier** (2022, March), *Selected topics from pre-launch scientific activities in Euclid*, SUPER-IRNET pour la Société Japonaise pour la promotion de la Science, done in remote
- **S. Escoffier** (2005, March), *Etude de la bioluminescence avec la ligne prototype d'Antares*, CPPM, Marseille

## PUBLICATION LIST

Co-author of 181 reviewed papers (**h-index: 70**), including 18 cited more than 500.

IdHAL: <https://cv.archives-ouvertes.fr/stephanie-escoffier>

## With main/significant contributions

1. J. Le Graet, A. Secroun, M. Tourneur-Silvain, W. Gillard, N. Fourmanoit, **S. Escoffier**, E. Kajfasz, S. Kermiche, B. Kubik, J. Zoubian, S. Andreon et al. (**2026**), *Euclid: Methodology for derivation of IPC-corrected conversion gain of nonlinear CMOS APS*, arXiv: 2509.08810, *Astron. Astrophys.* 705 (2026) A138
2. G. Verza, G. Degni, A. Pisani, N. Hamaus, E. Massara, A. Benson, **S. Escoffier**, Y. Wang, Z. Zhai, O. Doré (**2025**), *Cosmology with voids from the Nancy Grace Roman Space Telescope*, arXiv:2410.19713, *Astrophys. J.* 993 (2025) 2, 227
3. S. Ferraiuolo, S. Mastrogiovanni, **S. Escoffier** and E. Kajfasz (**2025**), *Inferring astrophysics and cosmology with individual compact binary coalescences and their gravitational-wave stochastic background*, *Astron. Astrophys.* 701 (**2025**) A36, arXiv:2503.14686
4. S. Sartori, P. Vielzeuf, **S. Escoffier**, MC Cousinou, Kovacs, J. DeRose et al. (**2025**), *The imprint of cosmic voids from the DESI Legacy Survey DR9 LRGs in the Planck 2018 lensing map through spectroscopically calibrated mocks*, *Astron. Astrophys.* 700 (**2025**) A17, arXiv: 2412.02761
5. S. Gouyou Beauchamps, P. Baratta, **S. Escoffier**, W. Gillard, J. Bel, J. Bautista and C. Carbone (**2025**), *Cosmological inference including massive neutrinos from the matter power spectrum: biases induced by uncertainties in the covariance matrix*, arXiv:2306.05988, *Astron. Astrophys.* 693 (**2025**) A226
6. R. Boschetti, P. Vielzeuf, M-C Cousinou, **S. Escoffier** and E. Jullo (2024), *Towards cosmology with Void Lensing: how to find voids sensitive to weak-lensing and numerically interpret them*, *JCAP* 06 (**2024**) 067, arXiv: 2311.14586
7. A.G. Adame et al. (DESI Collab) (2024), "Validation of the Scientific Program for the Dark Energy Spectroscopic Instrument", arXiv: 2306.06307, *Astron. J.* 167 (**2024**) 2
8. P. Auclair et al. (LISA Collaboration) (2023), "Cosmology with the Laser Interferometer Space Antenna", *Living Rev. Rel.* 26 (**2023**) 1., arXiv:2204.05434
9. T.-W. Lan et al. (2023), "The DESI Survey Validation: Results from Visual Inspection of Bright Galaxies, Luminous Red Galaxies, and Emission Line Galaxies", *Astrophys. J.* 943 (**2023**) 68, arXiv:2208.08516

10. M. Bonici et al. (2023), “Euclid: Forecasts from the void-lensing cross-correlation”, *Astron. Astrophys.* 670 (2023) A47, arXiv: 2206.14211 [astro-ph.CO]
11. S. Contarini et al. (2022), “Euclid: Cosmological forecasts from the void size function”, *Astron. Astrophys.* 667 (2022) A162, arXiv: 2205.11525 [astro-ph.CO]
12. Arun et al. (LISA Collaboration) (2022), “New Horizons for Fundamental Physics with LISA”, *Living Rev. Rel.* 25 (2022) 4., arXiv: 2205.01597 [gr-qc]
13. M. Aubert, MC Cousinou, **S. Escoffier**, A. Hawken et al. (2022), “The Completed SDSS-IV Extended Baryon Oscillation Spectroscopic Survey: Growth rate of structure measurement from cosmic voids”, *MNRAS* 513 (2022) 186., arXiv:2007.09013
14. R. Paviot, S. de la Torre et al., “Angular systematics-free cosmological analysis of galaxy clustering in configuration space”, *MNRAS* 512 (2022) 1341., 2110.10184 [astro-ph.CO],
15. N. Hamaus, M. Aubert, A. Pisani, S. Contarini, G. Verza, MC Cousinou, **S. Escoffier**, A. Hawken et al. (Euclid Collaboration), “Euclid: Forecasts from redshift-space distortions and the Alcock-Paczynski test with cosmic voids”, *Astron. Astrophys.* 658 (2022) A20, arXiv: 2108.10347
16. A. Blanchard et al., “Gravitation And the Universe from large Scale-Structures: The GAUSS mission concept”, *Exp. Astron.* 51 (2021) 1623., arXiv:2102.03931, Voyage 2050 Science White Paper
17. S. Alam et al. (eBOSS Collaboration), “The Completed SDSS-IV extended Baryon Oscillation Spectroscopic Survey: Cosmological Implications from two Decades of Galaxy Surveys at the Apache Point observatory”, *Phys. Rev. D* 103 (2021) 083533, arXiv:2007.08991
18. A. Hawken, M. Aubert, A. Pisani, MC Cousinou, **S. Escoffier** et al., “Constraints on the growth of structure around cosmic voids in eBOSS DR14”, *JCAP* 06 (2020) 012, arXiv:1909.04394 [astro-ph.CO]
19. E. Jullo, S. de la Torre, M.-C. Cousinou, **S. Escoffier**, C. Giocoli, R.B. Metcalf, J. Comparat, H.-Y. Shan, M. Makler, J.-P. Kneib, F. Prada, G. Yepes, and S. Goetloeber, “Testing gravity and dark energy with galaxy-galaxy lensing and redshift-space distortions using CFHT-Stripe 82, CFHTLenS and BOSS CMASS datasets”, *Astron. Astrophys.* 627 (2019) A137, arXiv:1903.07160 [astro-ph.CO]
20. M.-C Cousinou, A. Pisani, A. Tilquin, N. Hamaus, A.-J Hawken, **S. Escoffier**, “Multivariate analysis of cosmic void characteristics”, *Astron. Comp.* 27 (2019) 53., arXiv:1805.07181 [astro-ph.CO]
21. P. Ntelis, A. Ealet, **S. Escoffier**, J.-C. Hamilton, A. J. Hawken, J.-M. Le Goff, J. Rich, A. Tilquin, “The scale of cosmic homogeneity as a standard ruler”, *JCAP* 1812 (2018) 14, arXiv:1810.09362 [astro-ph.CO]
22. N. Hamaus, M.-C. Cousinou, A. Pisani, M. Aubert, **S. Escoffier**, J. Weller, “Multipole analysis of redshift-space distortions around cosmic voids”, *JCAP* 07 (2017) 014., (arXiv:1705.05328 [astro-ph.CO])
23. S. Alam et al. (BOSS Collaboration), “The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: cosmological analysis of the DR12 galaxy sample”, *Month. Not. Royal Astron. Soc.* 470 (2017) 2617., (arXiv:1607.03155 [astro-ph.CO])
24. I. Tutusaus et al., “Power law cosmology model comparison with CMB scale information”, *Phys. Rev. D* 94 (2016) 103511.
25. N. Hamaus, A. Pisani, P. Sutter, G. Lavaux, **S. Escoffier**, B. Wandelt and J. Weller, “Constraints on cosmology and gravity from the dynamics of voids”, *Phys. Rev. Lett.* 117 (2016) 091302. (arXiv:1602.01784 [astro-ph.CO])
26. J. Comparat *et al.* (eBOSS Collaboration), “The SDSS-IV eBOSS emission-line galaxy pilot survey”, *Astron. Astrophys.* 592 (2016) A121.
27. C.-H. Chuang et al., “The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: single-probe measurements from CMASS anisotropic galaxy clustering”, *Month. Not. Royal Astron. Soc.* 461 (2016) 3781-3793.
28. K. Dawson et al. (eBOSS Collaboration), “The SDSS-IV extended Baryon Oscillation Spectroscopic Survey: Overview and Early Data”, *Astron. J.* 151 (2016) 44., (arXiv:1508.04473 [astro-ph.CO])
29. J. Comparat *et al.*, “The  $0.1 < z < 1.65$  evolution of the bright end of the [OII] luminosity function”, *Astron. Astrophys.* 575 (2015) 40.

30. M. Vargas-Magaña *et al.*, “The clustering of Galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: potential systematics in fitting of baryon acoustic feature”, *Month. Not. Royal Astron. Soc.* 445 (2014) 2-28.
31. L. Anderson *et al.*, “The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: Baryon Acoustic Oscillations in the Data Release 10 and 11 galaxy samples”, *Month. Not. Royal Astron. Soc.* 441 (2014) 24-62. (arXiv:1312.4877 [astro-ph.CO])
32. “Deep-sea bioluminescence blooms after dense water formation at the ocean surface”, C. Tamburini *et al.*, *PLoS ONE* 8 (2013) e67523.
33. “Search for relativistic magnetic monopoles with the ANTARES neutrino telescope”, S. Adrián-Martínez *et al.* (ANTARES Collaboration), *Astropart. Phys.* 35 (2012) 634–640. (arXiv:1110.2656 [astro-ph.HE])
34. “The ANTARES Telescope Neutrino Alert System”, M. Ageron *et al.* (ANTARES Collaboration), *Astropart. Phys.* 35 (2012) 530–536.
35. “Time calibration of the ANTARES neutrino telescope”, J. A. Aguilar *et al.* (ANTARES Collaboration), *Astropart. Phys.* 34 (2011) 539–549.
36. “ANTARES: The first undersea neutrino telescope”, M. Ageron *et al.* (ANTARES Collaboration), *Nucl. Instrum. Meth. A* 656 (2011) 11–38.
37. “Performance of the first ANTARES detector line”, M. Ageron *et al.* (ANTARES Collaboration), *Astropart. Phys.* 31 (2009) 277–283.
38. “The data acquisition system for the ANTARES neutrino telescope”, J. A. Aguilar *et al.* (ANTARES Collaboration), *Nucl. Instrum. Meth. A* 570 (2007) 107–116.
39. “First results of the Instrumentation Line for the deep-sea ANTARES neutrino telescope”, J. A. Aguilar *et al.* (ANTARES Collaboration), *Astropart. Phys.* 26 (2006) 314–324.
40. “Final analysis of proton form factor ratio data at  $Q^2=4.0, 4.8, \text{ and } 5.6 \text{ GeV}^2$ ”, A. J. R. Puckett *et al.*, *Phys. Rev. C* 85 (2012) 45203.
41. “Recoil polarization measurements for neutral pion electroproduction at  $Q^2=1(\text{GeV}/c)^2$  near the  $\Delta$  resonance”, J. J. Kelly *et al.*, *Phys. Rev. C* 75 (2007) 25201.
42. “Accurate measurement of the electron beam polarization in JLab Hall A using Compton polarimetry”, S. Escoffier *et al.*, *Nucl. Instrum. Meth. A* 551 (2005) 563–574.
43. “Recoil Polarization for  $\Delta$  Excitation in Pion Electroproduction”, J. J. Kelly *et al.*, *Phys. Rev. Lett.* 95 (2005) 102001.
44. “Parity-violating electroweak asymmetry in  $e \rightarrow p$  scattering”, K. A. Aniol *et al.* (HAPPEX Collaboration), *Phys. Rev. C* 69 (2004) 65501.
45. “Unique electron polarimeter analyzing power comparison and precision spin-based energy measurement”, J. M. Grames *et al.*, *Phys. Rev. ST Accel. Beams* 7 (2004) 42802. Erratum-*ibid* 13 (2010) 69901.
46. “Basic instrumentation for Hall A at Jefferson Lab”, J. Alcorn *et al.*, *Nucl. Instrum. Meth. A* 522 (2004) 294–346.
47. “First electron beam polarization measurements with a Compton polarimeter at Jefferson Laboratory”, M. Baylac, E. Burtin, C. Cavata, S. Escoffier *et al.*, *Phys. Lett. B* 539 (2002) 8–12.
48. “Measurement of GEp/GMp in  $ep \rightarrow ep$  to  $Q^2 = 5.6 \text{ GeV}^2$ ”, O. Gayou *et al.*, *Phys. Rev. Lett.* 88 (2002) 92301.
49. “New measurement of parity violation in elastic electron-proton scattering and implications for strange form factors”, K. A. Aniol *et al.* (HAPPEX Collaboration), *Phys. Lett. B* 509 (2001) 211–216.
50. “Compton scattering off polarized electrons with a high-finesse Fabry-Pérot Cavity at JLab”, N. Falletto *et al.*, *Nucl. Instrum. Meth. A* 459 (2001) 412–425.
51. “A photon calorimeter using lead tungstate crystals for the CEBAF Hall A Compton polarimeter”, D. Neyret *et al.*, *Nucl. Instrum. Meth. A* 443 (2000) 231–237.

## arXiv/White papers

1. Sartori, Contarini, Sarpa, Degni, Marulli, **Escoffier**, Moscardini (2026), The Back-in-time Void Finder: dynamical identification of cosmic voids through optimal transport reconstruction, arXiv: 2601.15378
2. V. Duret, **S. Escoffier**, W. Gillard et al. (2025), Euclid preparation: BAO analysis of photometric galaxy clustering in configuration space, arXiv:2503.11621
3. Besuner et al. (2025), The Spectroscopic Stage-5 Experiment, arXiv:2503.07923
4. V. Mainieri et al. (2024), “The Wide-field Spectroscopic Telescope (WST) Science White Paper”, e-Print: 2403.05398
5. **S. Escoffier** et al., “Jackknife resampling technique on mocks: an alternative method for covariance matrix estimation”, arXiv:1606.00233 [astro-ph.CO] (2016)
6. A. Aghamousa et al. (DESI Collaboration), “The DESI Experiment Part II: Instrument Design”, arXiv:1611.00037 [astro-ph.IM] (2016)
7. A. Aghamousa et al. (DESI Collaboration), “The DESI Experiment Part I: Science, Targeting, and Survey Design”, arXiv:1611.00036 [astro-ph.IM] (2016)
8. “Large Synoptic Survey Telescope: Dark Energy Science Collaboration”, LSST Dark Energy Science Collaboration, arXiv:1211.0310 [astro-ph.CO] (2012)
9. D. Schlegel et al. (BigBOSS Collaboration), “The BigBOSS Experiment”, arXiv:1106.1706 [astro-ph.IM] (2011)