

# Ciaran A. J. O'Hare

## Curriculum Vitae

School of Physics, University of Sydney  
Physics Rd, Camperdown NSW 2006, Australia

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🌐 [cajoha.re](http://cajoha.re)

🐦 [cajohare](https://twitter.com/cajohare)

🌐 [cajohare](https://orcid.org/0000-0001-9410-4410)

## Academic history

- 2022 **ARC DECRA Fellow**, *School of Physics*, University of Sydney, Australia.  
Grant: \$430.1k, "Unmasking dark matter: from the laboratory to the Milky Way", sole investigator
- 2019–2021 **Postdoctoral Research Associate**, *School of Physics*, University of Sydney, Australia.  
Supervisor: Celine Boehm
- 2017–2019 **Postdoctoral Researcher**, *Departamento de Física Teórica*, Universidad de Zaragoza, España.  
Supervisor: Javier Redondo

## Education

- 2013–2017 **PhD Physics**, *Particle Cosmology group*, University of Nottingham, United Kingdom.  
Supervisor: Anne Green  
Thesis: [WIMPs, neutrinos and axions in the next generation of dark matter experiment](#)
- 2009–2013 **Msci Physics**, University of Nottingham, 1st class (average: 92%).  
Supervisor: Adam Moss  
Thesis: [Dynamics of domain wall systems](#)

## Talks

Slides for the majority of my talks are available online at [cajoha.re/talks](http://cajoha.re/talks)

### Invited seminars and colloquia

- 2022 **Swinburne Institute of Technology Colloquium**, 'New discoveries from Gaia and direct dark matter searches'.
- 2022 **UC Santa Barbara**, 'Recoil imaging for dark matter, neutrinos, and BSM physics'.
- 2022 **University of Hawaii**, 'Axions as dark matter'.
- 2022 **Sydney-UNSW Colloquium**, 'Searching for dark particles across disciplines'.
- 2022 **Indian Institute of Technology, Mumbai**, 'New discoveries from Gaia and direct dark matter searches'.
- 2022 **University of New Mexico**, 'Venturing into the neutrino fog'.
- 2022 **Northwestern University**, 'Venturing into the neutrino fog'.
- 2021 **Georg-August-Universität Göttingen**, 'Venturing into the neutrino fog'.
- 2021 **UC San Diego**, 'ALPs to Axions: dark matter in the post-inflationary scenario'.
- 2021 **University of Nottingham**, 'Axions as dark matter'.
- 2021 **Tsung-Dao Lee Institute**, 'Venturing into the neutrino fog'.
- 2021 **Nanjing Normal University**, 'Venturing into the neutrino fog'.
- 2021 **Melbourne University**, 'Venturing into the neutrino fog'.
- 2021 **SLAC**, 'The status and future of directional recoil detection'.
- 2021 **Fermilab**, 'Directional dark matter detection and the CYGNUS project'.
- 2021 **UCLA**, 'Directional dark matter detection'.
- 2021 **Sydney CPPC**, 'Dark matter detection off the beaten path'.
- 2020 **Australian National University**, 'Directional dark matter detection'.
- 2020 **University of New South Wales**, 'Axions and their detection'.

- 2019 **University of Barcelona, 'Axtronomy'.**
  - 2019 **University of Sydney, 'Dark matter detection'.**
  - 2019 **IFT, Madrid, 'Gaia and direct dark matter detection'.**
  - 2019 **Laboratori Nazionali di Frascati, 'Introduction to directional detection'.**
  - 2018 **Texas A&M University, 'How to build an axion observatory'.**
  - 2018 **Max Planck Institute, Munich, 'Axiostronomy'.**
  - 2017 **King's College London, 'Directly detecting the Milky Way halo'.**
- Invited presentations**
- 2022 **BREAD Collaboration meeting, Virtual.**  
'The dark matter velocity distribution'
  - 2022 **IDM Conference, Vienna, Austria.**  
'Concluding talk'
  - 2022 **Snowmass Summer Meeting, Seattle, USA (Virtual).**  
'IF5: MPGDs for DM, neutrinos and BSM'
  - 2022 **International Workshop on Underground Physics, Tokyo, Japan.**  
'Recoil imaging and the CYGNUS experiment'
  - 2021 **International Joint Workshop on the SM and Beyond 2021, NTHU, Taiwan.**  
'Searching for the axions, on Earth and in space'
  - 2021 **Theory Workshop, DESY.**  
'Directional dark matter detection'
  - 2021 **ARC CoE for Dark Matter Fortnightly Meeting, Virtual.**  
'Dark photon limits: A cookbook'
  - 2021 **Asian Forum for Accelerators and Detectors, Novosibirsk (Virtual).**  
'Directional dark matter detection and the Cygnus experiment'
  - 2021 **ARC CoE for Dark Matter ECR Workshop, Virtual.**  
'The Cygnus experiment'
  - 2021 **Axions beyond Gen-2, University of Washington (Virtual).**  
'Axion haloscopes and the local dark matter distribution'
  - 2020 **Light Dark World workshop, Virtual.**  
'Axion constraints 2020'
  - 2020 **Magnificent CEvNS workshop, Virtual.**  
'Neutrino floors'
  - 2020 **IAXO Collaboration Meeting, Virtual.**  
'Axion helioscopes as solar magnetometers'
  - 2020 **MIAPP Workshop on axion cosmology, Technical University of Munich.**  
'Axion haloscopes and the local dark matter distribution'
  - 2019 **Dark Matter Searches in the 2020s, Institute for Cosmic Ray Research, Tokyo.**  
'Breaking through the neutrino floor'
  - 2019 **Cygnus directional detection workshop, Sapienza University of Rome.**  
'Physics case for the Cygnus experiment'
  - 2019 **DMUK Meeting, Kings' College London.**  
'Gaia and direct dark matter detection'
  - 2019 **Saturnalia Workshop, Universidad de Zaragoza.**  
'Dark Matter Hurricane'
  - 2019 **CYGNUS workshop, University of Hawaii (Virtual).**  
'Physics reach for the Cygnus experiment'
  - 2018 **MADMAX Collaboration Meeting, Max Planck Institute, Munich.**  
'The axion velocity distribution'
  - 2018 **Workshop on ultralight dark matter and axions, University of Michigan.**  
'Directional axion detection'

- 2017 **Theoretical Physics Seminar**, *Universidad de Zaragoza*.  
'Directly detecting the Milky Way halo'
- 2016 **IDM**, *University of Sheffield*.  
'Dark matter detection and the neutrino floor'
- 2015 **11th Patras workshop on axions, WIMPs and WISPs**, *Universidad de Zaragoza*.  
'Theoretical prospects for directional WIMP detection'

## Other conference & workshop presentations

- 2022 **Identification of Dark Matter**, *Vienna, Austria*.  
'Venturing into the neutrino fog'
- 2022 **ACAMAR Meeting on Astroparticle Physics**, *Virtual*.  
'Searching for axions as dark matter'
- 2021 **Asia-Pacific Workshop on Particle Physics and Cosmology**, *Virtual*.  
'Searching for dark photons as dark matter'
- 2019 **TeVPA**, *Sydney, Australia*.  
'The Cygnus experiment'
- 2019 **15th Patras workshop on axions**, *Freiburg, Germany*.  
'Direct detection and *Gaia*'
- 2018 **OAJ-LSC Synergies meeting**, *Universidad de Zaragoza*.  
'*Gaia* and direct dark matter detection'
- 2018 **14th Patras workshop on axions**, *DESY, Germany*.  
'Directional axion detection'
- 2017 **13th Patras workshop on axions**, *Thessaloniki, Greece*.  
'Axion/WIMP astronomy in dark matter experiments'
- 2017 **IOP Joint APP and HEP Conference**, *University of Sheffield*.  
'Measuring the dark matter velocity distribution with WIMPs and axions'
- 2016 **TeVPA**, *CERN*.  
'Dark matter detection and the neutrino floor'
- 2016 **LINK'16 Interdisciplinary conference**, *East Midlands Conference Centre*.  
'Detecting Dark Matter'
- 2015 **DMUK**, *University of Liverpool*.  
'Directional dark matter detection and the neutrino background'
- 2014 **BUSSTEPP**, *University of Southampton*.  
'Directional detection of dark matter substructure'

## Code

- 2021 **CompAxion**.  
Python notebooks for calculating model parameters and constraints for the "companion axion" model.
- 2021 **NeutrinoFog**.  
Code for the neutrino floor/fog for direct dark matter searches
- 2021 **DarkPhotonCookbook**.  
Code for accounting for daily modulation effects in direct searches for dark photons
- 2020 **AxionLimits**.  
Library of astrophysical, cosmological and experimental constraints on axions and axion-like particles [DOI: 10.5281/zenodo.3932430, Citations: 60]
- 2020 **solax**.  
Likelihood-based data analysis code for axion helioscopes such as IAXO. Includes precise solar axion flux calculations which account for the solar magnetic field.
- 2020 **AtmNuFloor**.  
Code for calculating the neutrino floor to direct dark matter experiments. It also allows for the inclusion of time, target and direction dependent methods for overcoming the neutrino floor.

2019

### DarkShards.

Code for analysing *Gaia* data to fit velocity and action-space substructures, as well as generate their corresponding signals in dark matter experiments.

2019

### IAXOmass.

Likelihood analysis code for measuring the axion mass in IAXO.

## Other academic service

2022

### Panel member, *University of Sydney Scholar Awards*.

Assessing awardees of undergraduate scholarships for the Faculty of Science

2022

### Local organising committee, *Sydney Spring Summer School*, Sydney, Australia.

<https://indico.cern.ch/event/1157732/>.

2022

### Local organising committee, *Dark Side of the Universe Conference*, Sydney, Australia.

<https://indico.cern.ch/event/1107937/>.

2021

### Associate investigator.

2022

ARC Centre of Excellence for Dark Matter Particle Physics

2022

### International advisory committee, *International Dark Matter conference*, Vienna, Austria.

<https://indico.cern.ch/event/922783/>.

2020

### Sydney CPPC.

2022

Organising a series of weekly online seminars and maintaining the [YouTube channel](#).

2020

### Dark Chatter.

2022

Host and organiser of a [web-series](#) for the promotion of early career researchers.

2021

### Snowmass '21, white paper convener.

2022

Instrumentation Frontier (IF5-WP3): Recoil imaging with micro-pattern gas detectors

2021

### PDG Review.

Supplied all six original figures for the chapter "Axions and other similar particles" in the 2021 [Particle Data Group \(PDG\) review of particle physics](#).

2020

### International advisory committee, *International Dark Matter conference*, Vienna, Austria.

<http://idm2020.hephy.at/>.

2018

### Local organising committee, *4th MADMAX Collaboration Meeting*, Zaragoza, Spain.

<https://indico.mpp.mpg.de/event/6018/overview>.

2018

### Local organising committee, *Probing the dark universe synergies workshop*, Zaragoza, Spain.

<https://riastronomia.es/en/probing-the-dark-universe-oaj-lsc-synergies/>.

2015

### Journal referee.

2022

Journal of Cosmology and Astroparticle Physics, Physical Review Letters, Physical Review D, Astronomy & Astrophysics, SciPost Physics, European Physics Journal C

## Teaching and Supervision

### The University of Sydney

2022

### Lecturer for OLET1640: **Astronomy, from the Big Bang to Darkness**, 1st year course.

4 hours lectures + 16 hours tutorials

2022

### Dalyell Individual Research SCDL3991, 2nd year BSc project.

2021

### Dalyell Showcase SCDL1991, Groups of 1st year BSc students (semester-long project).

2022

10 students total across two years

2020

### Physics Honours, 4th year BSc(Hons) students (year-long project).

2022

3 students total across three years

2020

### Physics Special Studies Program (SSP), 1st and 2nd year BSc students (semester-long project).

2022

17 students total across three years

2020

### Summer internship, High school student.

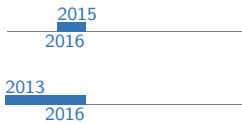
### University of Nottingham

2016

2017

### MSci Project, Developing Monte Carlo simulations for dark matter detectors.

(2 × 4th year students)



**MSci Project**, Distinguishing neutrino and WIMP signals in dark matter detectors.  
(2 × 4th year students)

**2nd year Msci physics workshops**, *University of Nottingham*,  
Approximately 3 hr/wk of workshop instruction in four 2nd year Physics courses.

- Quantum mechanics
- Thermal Physics and Statistical Mechanics
- Vector calculus and electromagnetism
- Optics and Fourier analysis

## Media

### Articles written



**CERN Courier**, *Astroparticle physicists head down under* .

<https://cerncourier.com/a/astroparticle-physicists-head-down-under/>

### Media coverage



**New Scientist**, *DNA-based detector could precisely track subatomic particles*.

<https://www.newscientist.com/article/2316360-dna-based-detector-could-precisely-track-subatomic-particles/>



**American Physical Society News**, *Redefining How Neutrinos Impede Dark Matter Searches*.

<https://physics.aps.org/articles/v14/s154>



**Centre of Excellence for Dark Matter Particle Physics**, *Meet the researcher*.

<https://www.centredarkmatter.org/all-posts/meet-the-researcher-ciaran-ohare-htrjn-mjf82>



**Discover magazine**, *How DNA can help in the search for dark matter* .

<https://www.discovermagazine.com/the-sciences/how-dna-can-help-the-search-for-dark-matter>



**AstroBites**, *MACHOs Find a New Weight Class to Compete In* .

<https://astrobites.org/2020/09/08/machos-weight-class/>

My publication *O'Hare et al. 2018* was covered by 49 media outlets in 2018.

Altmetric score of 495 (top 5% of all research outputs): <https://aps.altmetric.com/details/45496963>



**CNN**, *A dark matter hurricane is headed our way [sic]*.

<https://edition.cnn.com/2018/11/19/opinions/dark-matter-hurricane-headed-our-way-lincoln-opinion/index.html>



**Astronomy magazine**, *A 'dark matter hurricane' is storming past Earth* .

<http://www.astronomy.com/news/2018/11/a-dark-matter-hurricane-is-storming-past-earth>



**Cosmos magazine**, *Researchers brace for dark matter 'hurricane'* .

<https://cosmosmagazine.com/space/researchers-brace-for-dark-matter-hurricane>



**CNET**, *Scientists predict a 'dark matter hurricane' will collide [sic] with the Earth* .

<https://www.cnet.com/news/scientists-predict-a-dark-matter-hurricane-will-collide-with-the-earth/>



**Discover Magazine**, *A 'Dark Matter Hurricane'* .

<http://blogs.discovermagazine.com/d-brief/2018/11/12/dark-matter-hurricane/>



**Gizmodo Magazine**, *So What's Going on With That 'Hurricane of Dark Matter?'* .

<https://gizmodo.com/so-whats-going-on-with-that-hurricane-of-dark-matter-1830420899>

## Outreach

### Aimed at the public



**Dark Matter Day**, *U. Sydney*.

Organiser, speaker and panel member for an annual series of events organised as part of the worldwide Dark Matter Day (31st October)



**Science Slam**, *DESY, Hamburg*.

'On safari in the Milky Way'



**Pint of Science Festival**, *Bunkers Hill pub, Nottingham*.

'The Cosmic Pint'



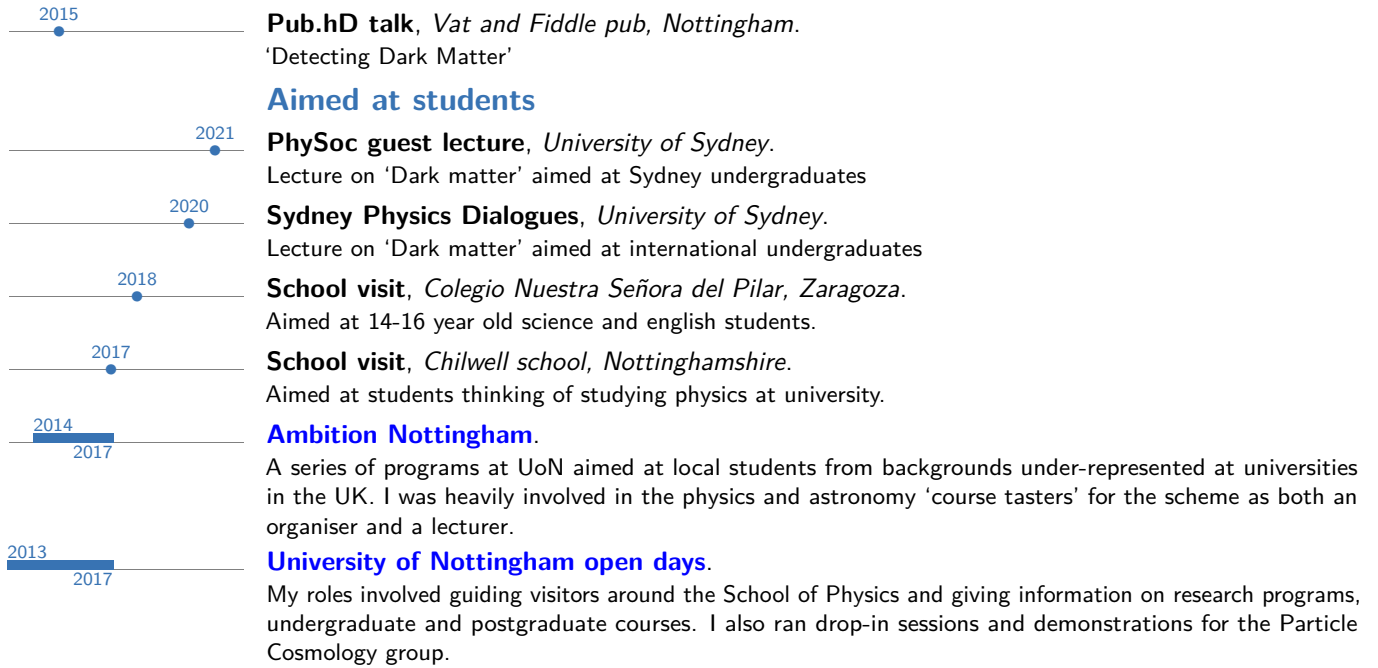
**Guest lecture**, *Manchester Astronomy Society*.

'The Dark Side'



**TEDxUoN talk**, *Portland Building, Nottingham*.

'Detecting Dark Matter'



I upload slides and other material related to my outreach at <https://cajoha.re/outreach>

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## Publications

Total citations: 1,861. Collected from the [inspireHEP](#) database

- Cooley et al. 2022 **37.** [‘Report of the Topical Group on Particle Dark Matter for Snowmass 2021’](#)  
Cooley et al.  
*Snowmass 2021 Cosmic Frontier CF1 Summary Report*  
[Cited by 3 records]
- Surrow et al. 2022 **36.** [‘Micro-pattern gaseous detectors’](#)  
Surrow et al.  
*Snowmass 2021 Instrumentation Frontier IF5 Summary Report*  
[Cited by 1 record]
- Adams et al. 2022 **35.** [‘Axion dark matter’](#)  
Adams et al.  
*Snowmass 2021 Cosmic Frontier White Paper (Contributed 3 figures)*  
[Cited by 32 records]
- Antybas et al. 2022 **34.** [‘New Horizons: Scalar and Vector Dark Matter’](#)  
Antybas et al.  
*Snowmass 2021 Cosmic Frontier White Paper (Contributed ~2000 words and 1 figure)*  
[Cited by 21 records]
- Akerib et al. 2022 **33.** [‘Dark Matter Direct Detection to the Neutrino Fog’](#)  
Akerib et al.  
*Snowmass 2021 Cosmic Frontier White Paper (Contributed 2000 words and 2 figures)*  
[Cited by 14 records]
- Abdullah et al. 2022 **32.** [‘Coherent elastic neutrino-nucleus scattering: Terrestrial and astrophysical applications’](#)  
Abdullah et al.  
*Snowmass 2021 Neutrino Frontier White Paper (Contributed ~1000 words and 1 figure)*  
[Cited by 15 records]
- O’Hare et al. 2022b **31.** [‘Recoil imaging for dark matter, neutrinos, and beyond the Standard Model physics’](#)  
C.A.J. O’Hare et al.  
*Snowmass 2021 Instrumentation Frontier White Paper (Coordinator, and lead author)*  
[Cited by 9 records]
- Aalbers et al. 2022 **30.** [‘A Next-Generation Liquid Xenon Observatory for Dark Matter and Neutrino Physics’](#)  
J. Aalbers et al.  
Accepted by *J. Phys. G* (Contributed ~1000 words and 1 figure)  
[Cited by 26 records]
- O’Hare et al. 2022a **29.** [‘Simulations of axion-like particles in the post-inflationary scenario’](#)  
C.A.J. O’Hare, G. Pierobon, J. Redondo, Y.Y.Y. Wong  
*Phys. Rev. D* **105** 055025 (2022)  
[Cited by 12 records, [animations](#)]
- Chen et al. 2021b **28.** [‘Cosmology of the companion-axion model: dark matter, gravitational waves, and primordial black holes’](#)  
Z. Chen, A. Kobakhidze, C.A.J. O’Hare, Z.S.C. Picker, G. Pierobon  
arXiv:2110.11014  
[Cited by 4 records, github page: <https://github.com/cajohare/CompAxion>]
- Chen et al. 2021a **27.** [‘Phenomenology of the companion-axion model: photon couplings’](#)  
Z. Chen, A. Kobakhidze, C.A.J. O’Hare, Z.S.C. Picker, G. Pierobon  
*Eur. Phys. J. C* **82** (2022) 940  
[Cited by 5 records, github page: <https://github.com/cajohare/CompAxion>]
- O’Hare 2021 **26.** [‘Fog on the horizon: a new definition of the neutrino floor for direct dark matter searches’](#)<sup>1</sup>  
C. A. J. O’Hare  
*Phys. Rev. Lett.* **127**, 251802 (2021)  
[Cited by 32 records, github page: <https://github.com/cajohare/NeutrinoFog>]
- Boehm et al. 2021b **25.** [‘Comment on: Cosmological black holes are not described by the Thakurta metric’](#)  
C. Boehm, A. Kobakhidze, C. A. J. O’Hare, Z. S. C. Picker, M. Sakellariadou  
arXiv:[2105.14908]  
[Cited by 11 records]

- O'Hare et al. 2021a **24.** ['Particle detection and tracking with DNA'](#)  
C. A. J. O'Hare, Vassili G. Matsos, Joseph Newton, Karl Smith, Joel Hochstetter, Ravi Jaiswar, Wunna Kyaw, Aimee McNamara, Zdenka Kuncic, Sushma Nagaraja Grellscheid, and Céline Bøhm  
Eur. Phys. J. C, **82** 4 (2022) 306  
[Cited by 5 records]
- Caputo et al. 2021 **23.** ['Dark photon limits: a cookbook'](#)  
A. Caputo, A. Millar, C. A. J. O'Hare, E. Vitagliano  
Phys. Rev. D **104**, 095029 (2021)  
[Cited by 65 records, github page: <https://github.com/cajohare/DarkPhotonCookbook>]
- Vahsen et al. 2021 **22.** ['Directional recoil detection'](#)  
S. Vahsen, C. A. J. O'Hare, D. Loomba  
Annu. Rev. Nucl. Part. Sci. **71** 189–224 (2021)  
[Cited by 30 records]
- O'Hare & Vitagliano 2020 **21.** ['Cornering the axion with CP-violating interactions'](#)  
C. A. J. O'Hare, E. Vitagliano  
Phys. Rev. D **102**, 115026 (2020)  
[Cited by 31 records, github page: <http://cajohare.github.io/AxionLimits>]
- Vahsen et al. 2020 **20.** ['CYGNUS: Feasibility of a nuclear recoil observatory with directional sensitivity to dark matter and neutrinos'](#)  
S. Vahsen, C. A. J. O'Hare et al. (2020)  
[Cited by 48 records]
- Bøhm et al. 2021a **19.** ['Eliminating the LIGO bounds on primordial black hole dark matter'](#)  
C. Bøhm, A. Kobakhidze, C. A. J. O'Hare, Z. S. C. Picker, M. Sakellariadou  
JCAP **03** 078 (2021)  
[Cited by 40 records]
- O'Hare et al. 2020b **18.** ['Axion helioscopes as solar magnetometers'](#)  
C. A. J. O'Hare, A. Caputo, A. J. Millar, E. Vitagliano  
Phys. Rev. D **102**, 043019 (2020)  
[Cited by 28 records, github page: <http://cajohare.github.io/solax>]
- O'Hare 2020 **17.** ['Can we overcome the neutrino floor at high masses?'](#)  
C. A. J. O'Hare  
Phys. Rev. D **102**, 063024 (2020)  
[Cited by 34 records, github page: <http://github.com/cajohare/AtmNuFloor>]
- O'Hare et al. 2020a **16.** ['Dark Shards: velocity substructure from Gaia and direct searches for dark matter'](#)  
C. A. J. O'Hare, N. W. Evans, C. McCabe, G. Myeong, V. Belokurov  
Phys. Rev. D **101** (2020) no.2, 023006  
[Cited by 45 records, github page: <http://cajohare.github.io/DarkShards>]
- Dafni et al. 2019 **15.** ['Weighing the Solar Axion'](#)  
T. Dafni, C. A. J. O'Hare, J. Galán, I. G. Irastorza, F. J. Iguaz, K. Jakovčić, B. Lakić, G. Luzón, J. Redondo, E. Ruiz Chóliz  
Phys. Rev. D **99** 035037 (2019)  
[Cited by 30 records, github page: <http://cajohare.github.io/IAXOmass>]
- Evans et al. 2019 **14.** ['SHM++: A refinement of the Standard Halo Model for dark matter searches'](#)  
N. W. Evans, C. A. J. O'Hare, C. McCabe  
Phys. Rev. D **99**, 023012 (2019)  
[Cited by 115 records]
- O'Hare et al. 2018 **13.** ['A dark matter hurricane: measuring the S1 stream with dark matter detectors'](#)<sup>2</sup>  
C. A. J. O'Hare, C. McCabe, N. W. Evans, G. Myeong, V. Belokurov  
Phys. Rev. D **98**, 103006 (2018)  
[Cited by 59 records]
- Knirck et al. 2018 **12.** ['Directional axion detection'](#)  
S. Knirck, A. Millar, C. A. J. O'Hare, J. Redondo, F. Steffen  
JCAP **11** 051 (2018)  
[Cited by 52 records]



- O'Hare & Burrage 2018 **11.** ['The symmetron field profile in the galactic disk'](#)  
C. A. J. O'Hare & C. Burrage  
Phys. Rev. D **98** 064019 (2018)  
[Cited by 18 records]
- O'Hare 2017 **10.** ['Terrestrial WIMP/Axion astronomy'](#)  
C. A. J. O'Hare  
Contributed to the 13th Patras Workshop on Axions, WIMPs and WISPs, Thessaloniki  
[Cited by 1 record]
- O'Hare et al. 2017 **9.** ['Time-integrated directional detection of dark matter'](#)  
C. A. J. O'Hare, B. J. Kavanagh, A. M. Green  
Phys. Rev. D **96**, 083011 (2017)  
[Cited by 22 records]
- Battaglieri et al. 2017 **8.** ['US Cosmic Visions: New Ideas in Dark Matter 2017: Community Report'](#)<sup>3</sup>  
M. Battaglieri et al., FERMILAB-CONF-17-282-AE-PPD-T (2017)  
[Cited by 607 records]
- O'Hare & Green 2017 **7.** ['Axion astronomy with microwave cavity experiments'](#)  
C. A. J. O'Hare & A. M. Green  
Phys. Rev. D **95** 063017 (2017)  
[Cited by 56 records]
- Kavanagh & O'Hare 2017 **6.** ['Reconstructing the three-dimensional local dark matter velocity distribution'](#)  
B. J. Kavanagh & C. A. J. O'Hare  
Phys Rev. D **94**, 123009 (2016)  
[Cited by 24 records]
- O'Hare 2016 **5.** ['Dark matter astrophysical uncertainties and the neutrino floor'](#)  
C. A. J. O'Hare  
Phys. Rev. D **94**, 063527 (2016)  
[Cited by 56 records]
- Mayet et al. 2016 **4.** ['A review of the discovery reach of directional Dark Matter detection'](#)<sup>4</sup>  
F. Mayet, A. M. Green, J. B. R. Battat, J. Billard, N. Bozorgnia, G. B. Gelmini, P. Gondolo, B. J. Kavanagh, S. K. Lee, D. Loomba, J. Monroe, B. Morgan, C. A. J. O'Hare, A. H. G. Peter  
Physics Reports **627** (2016) 1  
[Cited by 183 records]
- O'Hare 2017 **3.** ['Theoretical prospects for directional WIMP detection'](#)  
C. A. J. O'Hare  
Contributed to the 11th Patras Workshop on Axions, WIMPs and WISPs, Zaragoza  
[Cited by 1 record]
- O'Hare et al. 2015 **2.** ['Readout strategies for directional detection beyond the neutrino background'](#)<sup>5</sup>  
C. A. J. O'Hare, A. M. Green, J. Billard, E. Figueroa-Feliciano, L. E. Strigari  
Phys. Rev. D **92**, 063518 (2015)  
[Cited by 78 records]
- O'Hare & Green 2014 **1.** ['Directional detection of dark matter streams'](#)<sup>6</sup>  
C. A. J. O'Hare & A. M. Green  
Phys Rev. D **90**, 123511 (2014)  
[Cited by 45 records]

<sup>1</sup> PRL [Editor's suggestion](#) and featured in *APS Physics*

<sup>2</sup> Featured in *APS Physics*

<sup>3</sup> Contributed projections for the CYGNUS experiment

<sup>4</sup> Selected as a highlighted article in *Physics Reports*

<sup>5</sup> Contains figure selected for *PRD Kaleidoscope Sep 2015*

<sup>6</sup> Contains figure selected for *PRD Kaleidoscope Dec 2014*