

# EVA DURÁN CAMACHO

*Astrophysics Researcher*

*ExGal-Twin Postdoctoral Fellow*  
*Instituto de Astrofísica de Canarias (IAC)*  
✉ [durancamacho.eva@gmail.com](mailto:durancamacho.eva@gmail.com)

🌐 *Personal website: <https://evadc.github.io/>*



## Employment

- Jan 2025– **Postdoctoral Fellow**, *Instituto de Astrofísica de Canarias (IAC)*, Tenerife, Spain.  
Current: Numerical simulations of Milky Way type Galaxies as part of the WIDERA ExGal-Twin project funded by the European Union. Code development to improve galaxy modelling, focusing on bar formation, feedback effects, dynamics and environmental effects on star formation.  
PI: Prof. Johan Knapen
- Jul–Aug **Research Assistant**, *University of Cambridge*, Cambridge, United Kingdom.  
2020: Effects of magnetic fields and rotation on the evolution of the early type of stars T Tauri using the STARS code. Advisor: Prof. Christopher Tout
- Jan–Jun **Laboratory Technician**, *Universidad Autónoma*, Madrid, Spain.  
2018: Extracting graphene samples from graphite at the Condensed Matter Department

## Education

- 2020–24 : **PhD, Astrophysics**, *Cardiff University*, Cardiff, United Kingdom.  
Supervisors: Dr. Ana Duarte Cabral & Dr. Paul Clark
- 2019–20 : **MAsT in Astrophysics**, *University of Cambridge*, Cambridge, United Kingdom.  
Supervisors: Dr. Giorgia Busso, Dr. Francesca D'Angeli & Prof. Mike Irwin
- 2015–19 : **Grado en Física**, *Universidad Autónoma*, Madrid, Spain.  
Supervisors: Prof. Gwendolyn Meeus & Dr. Yago Ascasibar

## Summer Schools

- Jul 2021 : **Interstellar Medium of Galaxies, from the Epoch of Reionization to the Milky Way**, *International Summer School*, IAU, Virtual Edition.

## Honours & Awards

- Mar 2023 **Taith Mobility Grant** (1280€), Higher Education – Research Mobility in Heidelberg (Germany)
- Aug 2022 **IAU Travel Grant** (1682€), International Astronomical Union (IAU)
- Aug 2022 **KAS Travel Grant** (318€, accommodation), Korean Astronomical Society (KAS)
- Jun 2022 **Travel Grant** (1594\$), Flatiron Institute (New York, USA)
- 2015–2019 : **Distinctions**, *Physics Degree*, Universidad Autónoma, Madrid, Spain.  
Análisis I (1st year), Electromagnetismo I (2nd year), Métodos Matemáticos Avanzados & Electrodinámica Clásica (3rd year), Física Atómica y Molecular & Física del Cosmos (4th year)

## Conferences & Seminars

- Nov 2023: **Star formation in the Milky Way and beyond**, *RAS meeting*, London, UK, Contributed Talk .
- Oct 2023: **Invited Seminar at Stefanie Walch-Gassner's Group**, Cologne, Germany.
- Sept 2023: **AREPO development workshop for ISM simulations**, *Manchester, UK*, Contributed Talk.

- Jul 2023: **National Astronomical Meeting**, *Astrophysical Simulations: Keeping up with the Frontier*, Cardiff, Wales, Contributed Talk .
- Jul 2023: **National Astronomical Meeting**, *Star formation across the Milky Way*, Cardiff, Wales, Contributed Talk.
- Jun 2023: **Star at Lyon: The Physics of Star Formation**, *Lyon*, France, Poster.
- Jun 2023: **Invited Seminar at the Galaxy Evolution Research Group**, *Oxford University*, Oxford, UK.
- Jun 2023: **Star Formation in the era of JWST**, *Paralia Katerinis*, Greece, Poster.
- Apr 2023: **Invited Seminar at the ISM Research Group**, *Heidelberg University*, Heidelberg, Germany.
- Aug 2022: **Star Formation in Different Environments**, *ICISE*, Quy Nhon, Vietnam, Contributed Talk.
- Aug 2022: **IAU Symposium 373: Resolving the Rise and Fall of Star Formation in Galaxies**, *IAU General Assembly XXXI*, Busan, South Korea, Poster.
- Jun 2022: **From Stars to Galaxies II: Connecting our understanding of star and galaxy formation**, *Chalmers*, Gothenburg, Sweden, Poster.
- Jun 2022: **Computational Astrophysics in the ngVLA Era: Synergistic Simulations, Theory, and Observations**, *Flatiron Institute*, New York, USA, Poster.
- Jan 2021: **UKRI STFC Introductory Course in Astronomy for New Research Students**, *Armagh Observatory and Planetarium*, Virtual Editon , Contributed Talk.
- Jun 2021: **Conference for Astronomy and Physics Students (CAPS '21)**, *University of Birmingham*, Virtual Editon , Poster.
- Nov 2021: **10th IRAM 30-meter School on Milimeter Astronomy**, *Institut de Radioastronomie Millimétrique*, Virtual Editon , Attendee.

## Publications

2024 **Durán-Camacho. E.** , et al., *Self-consistent modelling of the Milky Way structure using live potentials*, MNRAS.

2023 **Ge, Y.**, et al. (including **Durán-Camacho. E.**), *Large-scale Velocity-coherent Filaments in the SEDIGISM Survey: Association with Spiral Arms and Fraction of Dense Gas*, A&A.

### Submitted publications

**Durán-Camacho. E.** , et al., *Insights into the structure and kinematics of a Milky Way-like galaxy*, MNRAS.

### Publications in preparation

**Durán-Camacho. E.** , et al., *Tracing Galactic Ripples: Understanding Wave Phenomena in Longitude-Velocity Diagrams of Milky Way Simulations*.

### Conference Proceedings

2022 **Durán-Camacho. E.** , Duarte-Cabral, A., *Milky Way: structure via live potentials*. International Astronomical Union Proceedings Series

---

## Teaching & Outreach

- Oct 2024 - **Planet Hoppers Educational Game Developer**, Cardiff University, UK.
- Jan 2025 : Creation of an exoplanets database for the development of a card game to bring science closer to schools
- 2020-23 : **Marker and Demonstrator**, *1st-3rd year Physics*, Cardiff University, UK.  
Introduction to Astrophysics, Computational Physics, Computational Skills for Problem Solving, Atomic and Nuclear Physics, Optics, Environmental Physics
- Jul 2023: **Outreach events at the National Astronomical Meeting (NAM)**, Volunteer, Cardiff, UK.
- Jun 2023: **Astronomy on Tap**, Organising Committee, Cardiff, UK.
- 2020-21: **The Physics Mentor Project**, Mentor, Cardiff, UK.

---

## Computational skills

- Programming: AREPO (written in Fortran & C), Python, Matlab, C++
- Documents: LaTeX, Adobe, Word, Excel, PowerPoint
- Plotting: DataStudio, TopCat, SciDavis, CARTA, SAOImageDS9, Glue