Hannah E. McCall

CNRS-UChicago IRC Discovery PhD Fellow,
Astronomy & Astrophysics

AGN feedback · AGN outflows · Galaxy clusters · ICM physics

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EDUCATION

PhD Candidate, University of Chicago — 2022 — present
Astronomy & Astrophysics · Advisor: Prof. Irina Zhuravleva
X-ray view of the interplay between active galactic nuclei and their host halos

MSc, Rheinische Friedrich-Wilhelms-Universität Bonn — 2020 — 2022
Astrophysics · Advisor: Prof. Thomas H. Reiprich
X-ray imaging analysis of the Virgo Cluster with eROSITA

BA, Washington University in St. Louis — 2016 — 2020
Physics (High Distinction) · Advisor: Prof. Manel Errando
X-ray binary GX 301-2 with NICER

FELLOWSHIPS & AWARDS

- **CNRS-UChicago IRC Discovery PhD Fellowship** — 2026
- **Illinois Space Grant Consortium Fellowship** — 2024
- **University of Chicago McCormick Fellowship** — 2022
- **DAAD Study Scholarship** — 2020 — 2022
- **DAAD RISE Scholarship** — 2019
- **NSF REU Fellowship** — 2018
- **Florence Moog Honorary Scholarship** — 2018

OBSERVING TIME AWARDED

AS SCIENCE PI

XRISM GO-2 — Two observations of AWM 7 (350 ks) — 2025
XRISM GO-1 — Four observations of A3571 (575 ks) — 2024

SELECTED SUPPORTING CONTRIBUTIONS

GMRT — A3571 (8 hours) — 2026
NIKA-2 — A1914 (34 hours) — 2026

INVITED TALKS

- **Harvard & Smithsonian Center for Astrophysics Galaxy Cluster Seminar** — 2026
  Boston, MA, USA
- **8th Annual ICM Theory and Computation Workshop** — 2026
  Brno, Czech Republic
- **DESY Zeuthen Astroparticle Physics Seminar** — 2026
  Zeuthen, Germany
- **Washington University Astrophysics Seminar** — 2026
  St. Louis, MO, USA

SELECTED CONTRIBUTED TALKS

- **X-ray Universe** — 2026
  Elche, Spain
- **XRISM International Conference** — 2025
  Kyoto, Japan
- **22nd Annual AAS High Energy Astrophysics Division Meeting** — 2025
  St. Louis, MO, USA
- **First Results from the SRG/eROSITA All-Sky Survey Conference** — 2024
  Munich, Germany

COLLABORATIONS

- **XRISM** — 2023 — 2026
- **eROSITA** — 2021 — 2023

SELECTED TEACHING & MENTORING

Advised Students — Sofya Fadeeva, University of Chicago undergraduate — 2026

- **Black Holes** — 2023
  University of Chicago · Lab instructor and teaching assistant
- **Observations of Dark Matter and Dark Energy** — 2021
  Rheinische Friedrich-Wilhelms-Universität Bonn · Teaching assistant, designed and taught supplementary 8-week Python course
- **Introduction to Astrophysics** — 2020
  Washington University in St. Louis · Teaching assistant and tutor

SERVICE & OUTREACH

- **Astrophysics Department Graduate Student Mentor Program** — 2023 — present
  Facilitator
- **South Side Science Festival** — 2024 & 2025
  Experiment Lead
- **Women in Physics Mentor Program** — 2018 — 2020
  Founder & Facilitator

PRESS

- **"Supermassive black holes sit in 'eye of their own storms,' studies find"** — Feb. 2026
  University of Chicago
- **"Painting Galaxy Clusters by Numbers (and Physics)"** — Dec. 2025
  NASA & Chandra X-ray Observatory

TECHNICAL SKILLS

Programming — Python (Astropy, NumPy, SciPy, Pandas, Matplotlib), Java, Mathematica

X-ray Analysis — XSPEC, SPEX, HEASoft, CIAO, eSASS

Systems & Tools — Linux, Git, LaTeX, HPC systems

Languages — English (native) · German (B1, intermediate) · Spanish (basic)