

**Curriculum Vitae of Henric Krawczynski**  
**Wilfred R. and Ann Lee Konneker Distinguished Professor in Physics**

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### **Education**

Yale University	Astrophysics	Post-Doctoral 2000-2001
Max-Planck-Institut für Kernphysik	Astrophysics	Post-Doctoral 1997-2000
University of Hamburg, Germany	Physics	Ph. D. in Physics, 1997
University of Hamburg, Germany	Physics	Master of Science, 1994

### **Appointments**

Washington University in St. Louis	Wilfred R. and Ann Lee Konneker Distinguished Professor in Physics	2023 - ~
Washington University in St. Louis	Chair of the Physics Department	2022 - ~
Washington University in St. Louis	Professor	2011 - 2023
Washington University in St. Louis	Associate Professor	2007 - 2011
Washington University in St. Louis	Assistant Professor	2002 - 2007
Yale University	Lecturer	2001 - 2002

### **Current Projects**

#### **Theoretical and observational astrophysics:**

- Analysis and interpretation of *IXPE*, NICER, Swift XRT, *NuSTAR*, and *XL-Calibur* data.
- Development of radiative transport codes, including development of *kerrC* (modeling of black holes with accretion disk & coronas) and *polrad* (radiation transport).
- Extension of *kerrC* for the truncated disk hot inner flow geometry.
- Modeling of observational signatures of Black Hole X-ray Binaries.
- Tests of General Relativity based on electromagnetic observations of black holes.
- Searches for Physics Beyond the Standard Model based on astrophysical observations.
- Observational signatures of microlensed quasars.

#### **Experimental astrophysics:**

- Principal Investigator of the *XL-Calibur* hard X-ray polarimeter, flown in July 2024.
- Principal Investigator of *DR-TES* demonstrator of mini-Dilution Refrigerator and Transition Edge Sensor Arrays, flown in September 2024.
- Institutional Principal Investigator of the *SuperHERO* hard X-ray imaging mission, responsible for the 12 m composite carbon fiber - aluminum joint optical bench, and

data analysis and interpretation.

- Development of scalable Cadmium Zinc Telluride and Cadmium Telluride detector arrays for hard X-ray astronomy.
- Development of Microcalorimeter detectors with Transition Edge Sensor readout for gamma-ray spectroscopy for the future gamma-ray missions ASCENT (PI Kislat), and 511-CAM (PI Krawczynski).

## Publications and Impact (September 2025, NASA ADS)

<i>Refereed Journal Papers</i>	326
<i>Books</i>	1
<i>h-Index</i>	70 (NASA ADS)
<i>Total Citations</i>	16,916 (NASA ADS)

See publication list for details.

## Graduate Students

Name, graduation year, first position after graduation:

- J. Groger, current student
- M. Kundu, current student
- Hamta Farrokhi, current student
- Argen Detoito, current student
- Shravan Vengalil Menon, current student
- S. Chun, current student
- E. Gau, current student
- N. Rodriguez Cavero (2025), Post-Doc at UC Berkeley
- A. Hossen (2024), Post Doc at Penn State
- L. Lisalda (2024), Post-Doc at WashU
- A. West (2023), Post-Doc at University of Arizona
- Q. Abarr (2020), Post Doc at University of Maryland
- B. Beheshtipour (2018), Post Doc at Max Planck Institute for Physics
- J. Hoormann (2016), Post Doc at the University of Queensland
- R. Amini (2016), Systems Engineer at JPL
- Q. Guo (2014), industry
- S. Thibadeau (2012), high school teacher
- J. Martin (2012), industry
- A. Garson III (2007), Post Doc at WashU
- S. B. Hughes (2007), industry
- J. S. Perkins (2006), Research Scientist at the NASA Goddard Space Science Center
- K. J. Gutierrez (2005), Post-Doc at SISSA

## University Service at Washington University in St. Louis

Chair of the Physics Department	2022 - ~
Co-Founder and Executive Committee Member Quantum Sensor Center	2018 - ~
Dean's Advisory Board	2021 - 2022

Tenure and Promotion Committee	2019 - 2022
Faculty Council	2017 - 2018
Chair or Member of Work Climate Committee	2017 - 2022
Physics Department, Director of Undergraduate Studies	2012 - 2018
Member of Graduate Studies Committee	2008 - 2012
Member of Recruitment Committee	2004 - 2011

### Service to the Profession

Chair of Physics of the Cosmos, Gamma-Ray Science Interest Group	2017 - 2018
Member of the Executive Committee of the Physics of the Cosmos Program Analysis Group (PhysPAG)	2015 - 2018
Organization of the Gamma Ray Science Interest Group Special Session, "The Gamma Ray Science Interest Group," APS, Was. DC	Jan. 30, 2017
Member of NASA Senior review committee	2016
Member of the AAS HEAD Executive Committee	2013 - 2016
Universities Space Research Association Institutional Representative	2006 - 2015
Organizer of HEAD Special Session on "Balloon Borne Astrophysics Experiments", 14th AAS Meeting, Chicago, IL	Aug. 18, 2014
Member of the Science Frontier Panel "Galaxies across Cosmic Time" of the Decadal Review of Astronomy and Astrophysics, NRC	2009 - 2010
Member of the NASA Fermi User Group	2007 - 2010
Reviewer of NASA APRA, NuSTAR, and RXTE proposals	2002 - 2022
Referee for the journals AJ, ApJ, A&A, MNRAS, NIMA, PASJ	2002 - ~