# Connor Ayen Feltman

Department of Physics and Astronomy Tel: (715) 338-9155

403 Van Allen Hall E-mail: cfeltman@uiowa.edu

University of Iowa

Iowa City, IA, 52242 Website : physics.uiowa.edu/ cfeltman

#### **EDUCATION**

University of Iowa Iowa City, Iowa

Ph. D., Physics (Expected Graduation: Spring 2024)

August 2018-present

University of Iowa Iowa City, Iowa

M.S., Physics December 2022

University of Wisconsin - Eau Claire Eau Claire, Wisconsin

B.A., Physics May 2018

#### RESEARCH

#### Department of Physics and Astronomy, University of Iowa

2018-present

Graduate Research Assistant

Advisor(s): Dr. Craig A. Kletzing, Dr. Gregory Howes

Specialization(s): Space Plasma Physics & Instrumentation

- Magnetosphere-ionosphere coupling mechanisms and their resulting currents at low altitudes.
- Particle acceleration mechanisms and their effect on distribution functions within the auroral zone.
- Instrumentation: Testing of Electron and Ion Electrostatic Analyzers, and analysis of Langmuir Probes from the ACESII Sounding Rocket campaign.

#### **TEACHING**

#### Department of Physics and Astronomy, University of Iowa

**Graduate Teaching Assistant** 

• Classroom Laboratory Assistant - Tutor/assistant for the *Edge of Space* summer academy. Helped students built hardware to take low-altitude space physics measurements and present data. LINK HERE

Summer 2022

- Phys 1512 Discussion Instructor Electric & magnetic fields, optics, and modern physics.
   Spring 2019, Spring 2020, Fall 2022
- Phys 1511 Discussion Instructor Mechanics, fluids, thermodynamics and waves.
   Fall 2018, Fall 2019
- Phys 2704 Laboratory Instructor Quantum mechanics, special relativity, atomic and solid state physics.

  Spring 2019
- Phys 1511 Laboratory Instructor Mechanics, fluids, thermodynamics and waves.
   Fall 2018, Spring 2019

• **Department walk-in tutor** (Department Help Center) Fall 2018, Spring 2019

## Physics + Astronomy Department, University of Wisconsin - Eau Claire

Student Tutor

• Department walk-in Tutor

Spring 2016 - Spring 2018

• **University Tutor** (Academic Skills Center) Spring 2016 - Spring 2018

## **HONORS**

- Sigma Pi Sigma, National Physics Honor Society, 2018.
- Physics Beyond the Classroom Scholarship, 2017.

#### References

**Professor Gregory Howes** 

Ph. D. thesis advisor and teaching reference

Scott. R. Bounds, Ph.D.

Mentor and collegue

Professor Allison N. Jaynes

Mentor and teaching reference

E-mail: gregory-howes@uiowa.edu

Phone: +1 (319) 335-1221

E-mail: scott-bounds@uiowa.edu

Phone: +1 (319) 335-0694

E-mail: allison-n-jaynes@uiowa.edu

Phone: +1 (319) 335-3799

## PEER-REVIEWED PUBLICATIONS

\*\*\*Interferometric Study of Ionospheric Plasma Irregularities in Regions of Phase Scintillations and HF Backscatter

Bounds, L. B. N. Clausen, F. Di Mare, C. A. Feltman, Y. Jin, C. A. Kletzing, W. J. Miloch, J. I. Moen, K. Oksavik, R. Sawyer, T. Takahashi, T. K. Yeoman

American Geophysical Union, 2022. https://doi.org/10.1029/2021GL097013

\*\*\*Modulated Upper-Hybrid Waves Coincident With Lower-Hybrid Waves in the Cusp

C. Moser, J. LaBelle, R. Roglans, J. W. Bonnell, I. H. Cairns, C. Feltman, C. A. Kletzing, S. Bounds, R. P. Sawyer, S. A. Fuselier

American Geophysical Union, 2021

L. Olifer, C. Feltman, R. Ghaffari, S. Henderson, D. Huyghbaert, J. Burchill, A. Jaynes, D. Knudsen, K. McWilliams, J. Moen, A. Spicher, J. Wu American Geophysical Union, 2021.

<sup>\*=</sup>primary author

<sup>\*=</sup>secondary contribution

<sup>\*\*=</sup>equal contribution

<sup>\*\*\*=</sup>minor contribution

<sup>\*\*</sup>Swarm Observations of Dawn/Dusk Asymmetries Between Pedersen Conductance in Upward and Downward Field-Aligned Current Regions