Brian Argrow

- Professor, Aerospace Engineering Sciences
- Research & Engineering Center for Unmanned Vehicles (RECUV)
- Director, Integrated Remote & In Situ Sensing (IRISS)

Research Focus Areas:
- Unmanned aerospace vehicles (UAVs)
- High-speed and hypersonic aerodynamics
- Dense gas dynamics
- Rarefied gas dynamics

Li Baowen

- Professor, Mechanical Engineering

Research Focus Areas:
- Acoustic waves
- Applied physics
- Computer modeling
- Energy release/transport
- Nanotechnology

Stephen Becker

- Assistant Professor, Applied Mathematics

Research Focus Areas:
- Information extraction from various types of data sets
- Optimization
- Numerical linear algebra
- Sampling theory
- Compressed sensing and variants
Jed Brown
➢ Assistant Professor, Computer Science

Research Focus Areas:
➢ Efficient structure-exploiting solvers for multiscale, multiphysics, and heterogeneous problems
➢ Compatible and high-order solver-friendly discretizations
➢ Optimization, data assimilation, and experimental design
➢ Robust, modular, high-performance parallel software
➢ Metrics for communicating trade-offs in algorithms and hardware

Webster Cash
➢ Professor, Astrophysical & Planetary Sciences
➢ Professor, Aerospace Engineering Sciences
➢ Center for Astrophysics & Space Astronomy (CASA)

Research Focus Areas:
➢ Astrophysics
➢ Instrumentation
➢ Techniques (Physical Sciences)
➢ Optics
➢ Radiosources
➢ Infrared
➢ X-ray, Gamma Ray
➢ Spectroscopy

Scot R. Elkington
➢ Research Scientist, Laboratory for Atmospheric & Space Physics (LASP)

Research Focus Areas:
➢ Storm-time radiation belt dynamics processes
➢ Space weather forecasting
➢ Global magnetospheric circulation modeling
Frank Eparvier

- Senior Research Scientist, Laboratory for Atmospheric & Space Physics (LASP)

Research Focus Areas:
- Space weather
- Solar irradiance variability and its effects on the upper atmospheres of the Earth and other planets

Brian Fleming

- Research Scientist, Laboratory for Atmospheric & Space Physics (LASP)

Research Focus Areas:
- Ultraviolet space instrument design, fabrication, and calibration
- Energetic radiation escape from local galaxies
- Development of advanced mirror coatings for next generation broadband observatories
- Concepts for the first far-ultraviolet integral field spectrograph

Dejan Filipovic

- Associate Professor, Electrical, Computer & Energy Engineering
- Graduate Director, Electrical, Computer & Energy Engineering
- Antenna Research Group

Research Focus Areas:
- Electromagnetics
- RF and microwaves
- Antenna theory and design
Eric Frew

- Associate Professor, Aerospace Engineering Sciences
- Director, Research & Engineering Center for Unmanned Vehicles (RECUV)
- Integrated Remote & In Situ Sensing (RISS)

Research Focus Areas:

- Networked heterogeneous unmanned aircraft systems
- Optimal distributed sensing by mobile robots
- Controlled mobility in ad-hoc sensor networks
- Miniature self-deploying systems
- Guidance and control of unmanned aircraft in complex atmospheric phenomena

Albin Gasiewski

- Professor, Electrical, Computer & Energy Engineering
- Integrated Remote & In Situ Sensing (RISS)
- Center for Environmental Technology

Research Focus Areas:

- Electromagnetics
- RF and microwaves
- Remote sensing

Juliet Gopinath

- Assistant Professor, Electrical, Computer & Energy Engineering
- Assistant Professor, Physics

Research Focus Areas:

- Optics and photonics
- Nanostructures and devices
- Ultrafast lasers
- Spectroscopy
- Orbital angular momentum
- Materials
- Nonlinear and integrated optics
Laura Hale

- Systems Engineer, Laboratory for Atmospheric & Space Physics (LASP)

Focus Area:
- Space weather

Nils Halverson

- Director, Center for Astrophysics & Space Astronomy (CASA)
- Associate Professor, Astrophysical & Planetary Sciences
- Associate Professor, Physics

Research Focus Areas:
- Cosmic microwave background experimentation
- Mm-wave instrumentation development efforts

Chris Heckman

- Assistant Professor, Computer Science
- Autonomous Robotics & Perception Group

Research Focus Areas:
- Robotics
- Control theory
- Nonlinear dynamics
- Computer perception
- Autonomous vehicles
Brian Johnson
- Manager, NASA Distributed Active Archive Center (DAAC)
- National Snow and Ice Data Center

**Research Focus Areas:**
- Remote sensing
- Data analysis
- Science data management

Will Kleiber
- Assistant Professor, Applied Mathematics

**Research Focus Areas:**
- Spatial statistics
- Stochastic weather generators
- Calibration, emulation and validation of geophysical models
- Statistical climatology

Delores Knipp
- Research Professor, Aerospace Engineering Sciences
- Colorado Center for Astrodynamics Research (CCAR)

**Research Focus Areas:**
- Atmospheric and space physics
- Upper atmosphere electrodynamics
- Plasma physics
- Satellite drag
- Space weather as a system
- Data assimilation
Shelley Knuth
- Director of Analytics Hub, Earth Lab
- Assistant Director of Research Data & Training, Research Computing

Experience:
- Data management
- Quality control

Tobin Munsat
- Associate Professor, Physics
- EPEN Faculty Advisor, Physics
- Director, Center for Integrated Plasma Studies (CIPS)
- Deputy Principal Investigator, Institute for Modeling Plasma, Atmosphere, & Cosmic Dust

Research Focus Areas:
- Hypervelocity micrometeoroid impact research
- Fluctuation measurements in plasmas
- Relationship of turbulent quantities to cross-field plasma transport
- Microphysics of dust impacts which drive the dusty plasma equilibria

Julie Lundquist
- Assistant Professor, Atmospheric & Oceanic Sciences (ATOC)
- Fellow, Renewable & Sustainable Energy Institute (RASEI)
- National Wind Technology Center, National Renewable Energy Laboratory (NREL)

Research Focus Areas:
- Boundary-layer meteorology
- Numerical weather prediction
- Large-eddy simulations
- Renewable energy applications
- Urban Meteorology
- Climatology
Valentin Martinez Pillet

- Director, National Solar Observatory

**Research Focus Areas:**

- Solar magnetic field measurements, analysis, and related instrumentation

Zoya Popovic

- Professor, Electrical, Computer & Energy Engineering
- Microwave & RF Research Group

**Research Focus Areas:**

- Electromagnetics, RF and Microwaves
- High-efficiency microwave millimeter techniques
- Intelligent RF circuits and antenna arrays
- RF optics

Dimitra Psychogiou

- Assistant Professor, Electrical, Computer & Energy Engineering

**Research Focus Areas:**

- Electromagnetics, RF and Microwaves
Sriram Sankaranarayanan
 Assistant Professor, Computer Science

Research Focus Areas:
• Reachability and stability verification of hybrid dynamical systems
• Automatic approaches to falsification (counterexample generation)
• Correct-by-construction synthesis of control systems
• Probabilistic program analysis/verification
• Optimization and decision problems such as guaranteed nonlinear optimization and multilinear problems

Hanspeter Schaub
 Professor, Aerospace Engineering Sciences
 Associate Chair for Graduate Studies, Aerospace Engineering Sciences
 Colorado Center for Astrodynamics Research (CCAR)
 Autonomous Vehicle Systems (AVS) Lab

Research Focus Areas:
• Orbital mechanics
• Relative motion dynamics
• Attitude dynamics and control
• Nonlinear dynamics
• Charged astrodynamics

Daniel Scheeres
 Professor, Aerospace Engineering Sciences
 Colorado Center for Astrodynamics Research (CCAR)
 Celestial & Spaceflight Mechanics Laboratory

Research Focus Areas:
• Astrodynamics
• Satellite navigation, orbit determination and control
• Celestial mechanics
• Planetary science
Sebastian Schmidt
- Associate Professor, Laboratory for Atmospheric & Space Physics (LASP)
- Associate Professor, Atmospheric & Oceanic Sciences (ATOC)

Research Focus Areas:
- Cloud, aerosol, trace gas shortwave passive remote sensing
- Radiative energy budget – measurements and modeling
- Instrument development for airborne spectrometry / irradiance measurements
- Field experiment development, flight planning, data acquisition and analysis
- Satellite validation through airborne measurements

David Stone
- Professional Research Assistant, Cooperative Institute for Research in Environmental Sciences (CIRES)

Research Focus Areas:
- Space weather

Daniel Szafir
- Assistant Professor, ATLAS Institute
- Assistant Professor, Computer Science
- Research & Engineering Center for Unmanned Vehicles (RECUV)

Research Focus Areas:
- Human-robot interaction
- Human-computer interaction
- Enhancing the assistive capabilities of small free-flying robots
- Leveraging novel sensing and intervention technologies to improve student learning in educational settings
Jeffrey Thayer
- Professor, Aerospace Engineering Sciences
- Associate Chair for Undergraduate Studies, Aerospace Engineering Sciences
- Professor, Atmospheric & Oceanic Sciences (ATOC)
- Director, Colorado Center for Astrodynamics Research (CCAR)

Research Focus Areas:
- Remote sensing of atmosphere & ionosphere using LIDAR and radar
- Optical systems and design
- Atmospheric and space physics
- Geophysical fluid dynamics
- Electrodynamics
- Plasma physics

Kristy Tiampo
- Professor, Geological Sciences
- Director of Earth Science & Observation Center, Cooperative Institute for Research in Environmental Sciences (CIRES)

Research Focus Areas:
- Fault systems dynamics and statistical seismology
- Geodetic and remote sensing techniques
- GPS data analysis
- InSAR data analysis
- Numerical and computation modeling
- Nonlinear inversions and data assimilation

Colin Towery
- Research Assistant, Turbulence & Energy Systems Laboratory (TESLa)
- 5th Year PhD Student, Department of Mechanical Engineering

Research Focus Areas:
- Turbulence physics
- Reacting flows and turbulent combustion
- Multi-scale, multi-physics interactions
- Computational fluid dynamics (CFD) modeling
Douglas Weibel
- Senior Research Professional, Integrated Remote & In Situ Sensing (IRISS)

Research Focus Areas:
- Making unmanned aircraft systems a valuable and easy to use tool for researchers in a wide variety of fields

Luis Zea
- Research Associate, Aerospace Engineering Sciences
- Bioastronautics Research Group

Research Focus Areas:
- Bioastronautics
- Gravitational microbiology
- Space life sciences
- Biological regenerative life support systems
- Small satellites
- CubeSats
- International cooperation for space exploration
- STEM outreach