

# FAST - Future Aerospace Strategic Thinking

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SPACE STUDIES

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# FAST Research Session Presentation Overview

- Future Research
  - Not an existing project.
- Aerospace Research
  - Involves aerospace personnel and facilities.
- Strategic Planning
  - FAST Presentation
  - Discussions
  - White Paper / Proposal
- Thinking about the Whole Project
  - Development of the project.





# FAST Research Session Presentation Format

- One Slide
- Need/Problem
- Concept
- Apparatus
- Objective
- Advancement
- End Users / Sponsor
- 3 Minute Presentation
- 3+ Minutes for Questions and Transition



# FAST Research Session Slide Summary

- Put everything on one slide.
- Three main sections from left to right is good.
- Somewhat similar to a conference poster.
- Include a key concept figure, if possible.
- Do not need to cover everything in 3 minute overview.
- Covers material that would be in a White Paper.
- Next slide is a template to use.
- Modified from NASA technology development slide.





# FAST Research Session Attendee Participation

- Ask Questions after each Presentation
- Research Topic Discussions Follow-on
  - Brief Discussion following Session
  - Optional in-depth Robin Hall Atrium
- Informal Project Idea Discussion
  - **Weds., 12-1 pm, Robin Hall Atrium**
- Present at Future FAST Sessions
  - **September 10, 2025 at 12-1 pm**
  - November 12, 2025 at 12-1 pm
  - February 12, 2026 at 12-1 pm



# Previous FAST Presentation Updates

## September 2024

**Daile Zhang**, Aerial-Borne Electric Field Mills and Soundings for Studying Warm Clouds, Fogs, and Dust

- Co-I on 2.5 M NASA Proposal Submitted yesterday (02/11/2025)

## November 2014

**Jake Carstens**, UND Weather Update: Building a Student-Integrated Leader at the Intersection of Meteorology, Education, and Social Science

- Been in discussions with people in the Education at UND. Modifications into Broadcast Class.

**Rachel Jones**, Encouraging Research in Amateur Radio

- In Antarctica currently, hope to make more progress later in the semester.

**Jeffrey VanLooy**, LiDAR for Analysis of Rock Glacier Mass Balance and Water Quantity Calculations

- Search for place to submit proposal.

**Keith Crisman**, Casualty Autonomous Emergency Transport [CATT]

- Working on plans for testing facility.



# February 12, 2025 FAST Presentation List

## **Jordan Christian, Atmospheric Sciences**

- Predictability of Flash Drought in Subseasonal Forecasting Systems

## **Francisco Del Canto Viterale, Space Studies**

- Building a Stronger North Dakota Aerospace Workforce

## **Cathy Finley, Atmospheric Sciences**

- Supercell Morphology Changes Associated with Seasonal Sounding Variations Yielding Equivalent Convective Parameters

## **Michael Ullrich, Aviation**

- Developing a Digital-twin Fest-bed for UAV Swarm: From Concept to Flight

## **Marcos Fernandez Tous, Space Studies**

- Writing Proposals for Funding Opportunities in STEM

