



“AEGIS Propulsion Systems Integration”

Speaker: Dr. Dale Thomas

Deputy Director, UAH Propulsion Research Center
Director, Alabama Space Grant Consortium
Professor/Eminent Scholar, Industrial & Systems Engineering
and Engineering Management



Abstract

The AEGIS (Alabama Experiment for Galactic-ray In-situ Shielding) is a 6U CubeSat proposed by the Alabama Space Grant Consortium for launch as a secondary payload aboard the Artemis II mission in 2022. The spacecraft mission is to measure the effectiveness of lunar regolith as a shielding material against cosmic radiation. AEGIS is a collaborative endeavor of the seven member universities of the ASGC, including UAH, Auburn, USA, Alabama, Tuskegee, Alabama A&M, and UAB.

Biographical Sketch

UAH Alumnus (1988) Dr. L. Dale Thomas joined ISEEM in Fall 2015 as a full professor and was Board-appointed as the Eminent Scholar in Systems Engineering. Within a year, he established the UAH Complex Systems Integration Laboratory (CSIL), UAH's advanced systems engineering research facility focusing on Model-Based Systems Engineering. Among several projects, the lab is assisting the NASA Marshall Space Flight Center (MSFC) with cube satellites to be deployed during the first Space Launch System in 2019. In July 2017, he was appointed as the Deputy Director of the UAH Propulsion Research Center (PRC). In that role, he leads the Propulsion Systems Engineering research team and engages in strategic planning activities.

In July 2017, Dr. Thomas was appointed Director of the Alabama Space Grant Consortium, the congress-created body that implements a portfolio of programs in research, education and public service projects in science and engineering. Dr. Thomas' core objective in assuming the role is to strengthen ties between academic researchers and industry.

There will be guided tours of our Johnson Research Center Laboratories following the luncheon.

PRC Student Luncheon - Faculty/Industry Mentoring
UAH Propulsion Research Center
 Friday, February 28, 2020



UAH Propulsion Research Center
 Prof. R. Frederick, PhD, Director
 Prof. D. Thomas, PhD, Deputy Director
<https://www.uah.edu/prc>

A. Edmondson, MBA
 Research Prog. Administrator/Budget Analyst
 G. Cromartie, Program Coordinator; J. Crews, SS4; K. Neese, SS4

Eminent Scholar In Propulsion
 Prof. P. Ligrani, PhD

Aerospace Propulsion Strategic Planning
 Prof. D. Thomas, PhD, Eminent Scholar in Systems Engineering
 Prof. J. Swain, PhD, Chair of ISEEM Department; Prof. S. Mahalingam, PhD,
 Dean of the College of Engineering

Propulsion Laboratory and Safety
 Dr. D. Lineberry, PhD, Laboratory Operations
 T. Hall, Test Engineer

Energy & Power Systems
 Prof. P. Ligrani, PhD

Fusion Propulsion & Power
 Prof. J. Cassibry, PhD

Plasmas & Combustion
 Prof. G. Xu, PhD

Propulsion Systems Integration
 Prof. D. Thomas, PhD

Computational Modeling
 Prof. S. Rani, PhD

Aerospace Materials & Structures
 Prof. G. Nelson, PhD

Propellants & Energetics
 Prof. R. Frederick, PhD

Propulsion System Technology Test-bed
 Dr. D. Lineberry, PhD

- J. Blackmon, PhD
- P. Collopy, PhD
- K. Frendi, PhD
- C. Kang, PhD
- S. Mahalingam, PhD
- G. Nelson, PhD
- S. Rani, PhD
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- A. Click, GRA
- H. Collopy, GRA
- M. Sampson, GRA
- G. Schmidt, GRA
- S. R. Vanga, GRA
-
- M. Cox, UGA
- K. Goethals, UGA
- M. Hockensmith, UGA
- J. Knox, UGA, C. Larson, UGA
- w. Manneschildt, UGA
- J. McDonough, SS3
- E. McNabb, UGA
- J. Moseley, UGA, C. Smith, UGA

- A. Davis, OCE
- W. Seidler, OCE
- K. Schillo, OCE
-
- E. Burns, SS4
- S. Westrich, SS4
-
- P. Darakom, GRA
- D. Hewitt, PTGS
- S. Kumar, GRA
- M. Rodriguez, PTGS
- N. Schilling, GRA
- R. Tackett, PTGS
- B. Taylor, PTGS
- S. Thompson, PTGS
- A. Vyas, GRA
- B. Winterling, GRA

- J. Cassibry, PhD
- K. Frendi, PhD
-
- N. Anderson PTGS
- W. Bickett, PTGS
-
- R. Gott, GRA
- M. Spaulding GRA
- A. Walsten, GRA
- Z. White, GRA
-
- M. Amara, UGA
- D. Brick, UGA
- S. Kaye, UAGM
- N. Laya, UGA
- B. Williams, UGA

- J. Cassibry, PhD
-
- A. Aueron, GRA
- S. Godshall, GRA
- L. Grumbach, PTGS
-
- V. Lopez, GRA
- N. Morris, GRA
- D. Nikitav, GRA
- S. Raghu, GTA
-
- S. Rawlins, GRA
- E. Wood, GRA
-
- Rountree, UGA
- A. Shah, UGA

- K. Frendi, PhD
- C. Kang, PhD
- S. Mahalingam, PhD
- S. Ravindran, PhD
- B. Shotorban, PhD
-
- A. Avad, GRA
- S. Basu, GRA

- K. Hazeli, PhD
- M. Lin, PhD
- J. Schneider, PhD
- G. Wang, PhD
-
- M. Angeles, SS4
- N. Ulmer, SS4
-
- P. Anantwar, GRA
- D. Jones, GRA
- B. Bahramibabamiri, GRA
- J. Buckley, GRA
- S. Kumar, GTA
- J. Indeck, GRA
- D. Sandlin, PTGS
-
- A. Colbert, UGA
- T. Colbert, UGA

- J. Baird, PhD
- M. Banish, PhD
- J. Blackmon, PhD
- D. Lineberry, PhD
- G. Xu, PhD
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- W. Knuth, OCE
- S. Williams, OCE
-
- S. Bluestone, PTGS
- D. Jones, GRA
- D. Haring, GRA
- S. Kumar, GTA
- J. Laub, PTGS
- A. Patel, GRA
- R. Pereira, GTA
- Randade, GTA
- E. Unruh, GRA
-
- A. Hunt, SS5
- T. Salverson, UGA, J. Willoughby, UGA

- J. Winningham, M.S.,CSE
-
- W. Hankins, GRA
-
- J. Agnew, UGA
- D. Battle, UGA
- M. Costa, UGA
- D. Long, UGA
- J. Venters, UGA
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- MAE 490/491 Students---
- K. Caruso Jr., P. Day,
- J. Hart, M. Hockensmith,
- C. Hyder, J. Jacobs,
- J. Jordan, B. Lucke,
- R. Luke II, P. Martin,
- J. McIntosh, J. Moseley,
- R. O'Kraski, N. Roman,
- T. Salverson, W. Snyder,
- J. Zike

GRA=Graduate Research Assistant; GTA=Graduate Teaching Assistant; OCE=On-Call Employee; Post-Doctoral Fellow;
 PTGS=Part-Time Graduate Student; RI=Research Institute; SS3=Student Specialist III; SS4=Student Specialist IV; SS5=Student Specialist V
 UGA=Undergraduate Assistant, UAGM=Undergraduate Matrix
 02/06/2020