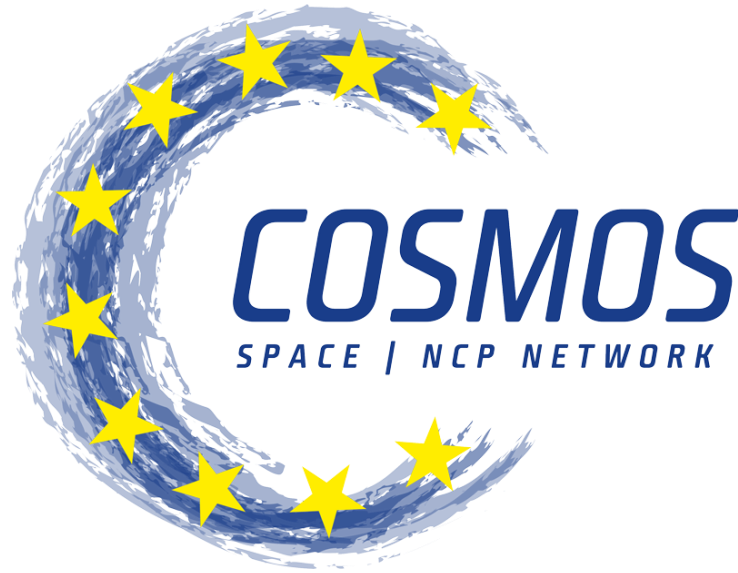


Pitch session



The capabilities of the Air Force Institute of Technology to support aerospace HE activities

Artur Kurnyta, PhD Eng.

Air Force Institute of Technology, Poland



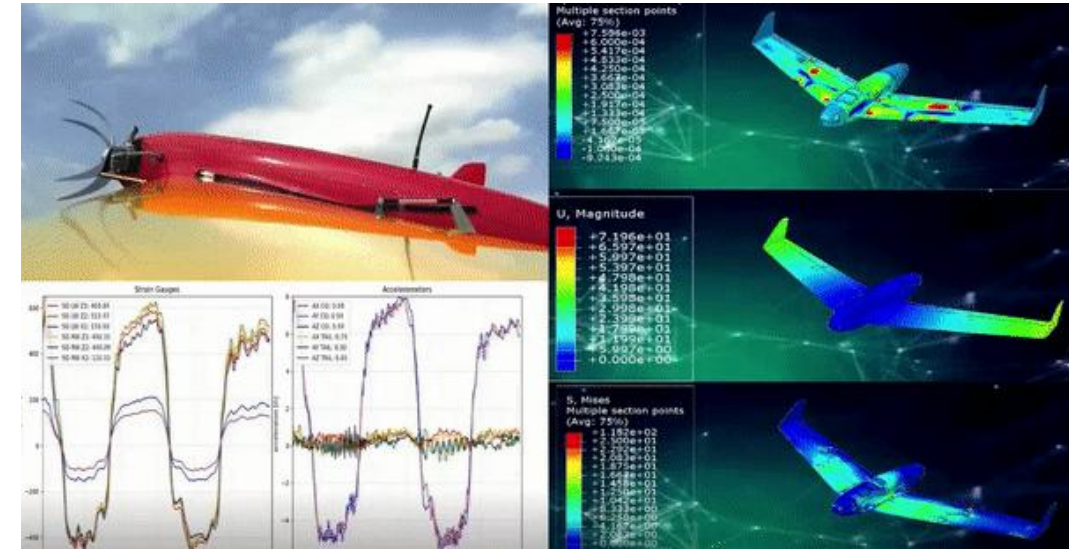
Pitch session

Our project idea

Improved space transportation systems and launcher sustainability, through integrated health monitoring system and digital twin

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- Material, structure, full-scale durability / integrity
- Composite / multifunctional materials
- In – flight / on – ground structure dynamics monitoring
- Impact / degradation / damage detection (SHM, NDT)
- Integrated multi – sensor systems
- Advanced data analysis / data science / fusion
- System engineering & implementation
- Airworthiness, safety, reliability



Pitch session

Possible topics to participate:

- HORIZON-CL4-2025-02-SPACE-12 / -SPACE-13
- HORIZON-CL4-2025-02-SPACE-31 (data processing and analysis, AI/ML);
- HORIZON-CL4-2025-02-SPACE-41 / -SPACE-45 (data processing and analysis, AI/ML)

Keywords: Health Monitoring System, SHM, Integrated Sensor Networks, On – board Data Processing, Real – Time CBM, Structural Integrity, Smart Launchers, Smart Tanks, Digital Twin, SW – driven HW, Data/Model – Driven Analysis, Predictive Maintenance, NDT, Damage Detection, Multifunctional Materials, Material / Mechanical Engineering

Past / Ongoing activities relevant to the topic:

ASTYANAX / SAMAS / SAMAS2 (EDA); HYDEF (EDF),

COMP-ECO (HE), PERUN, DSTAR, DETEKTA, TAPSES, SYMOST (Domestic)



Pitch session

Contact us

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