Technical workshop on manufacturing and verification of vacuum components, Lycksele 4 Nov 2026

Opportunities for collaboration with LTU in space, aviation and related fields

Olle Persson, LTU Space Center manager
Anna Öhrwall Rönnbäck, professor product innovation

Luleå University of Technology
and Aerospace Cluster Sweden

big science sweden



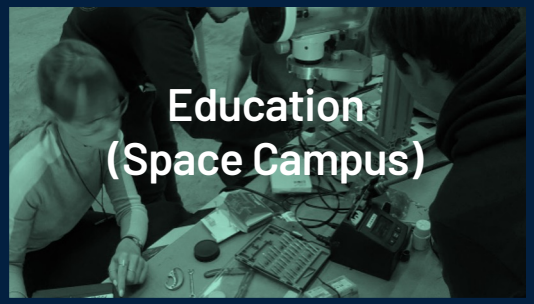
Capabilities - from education and research to industry

The regional ecosystem is connected and competitive













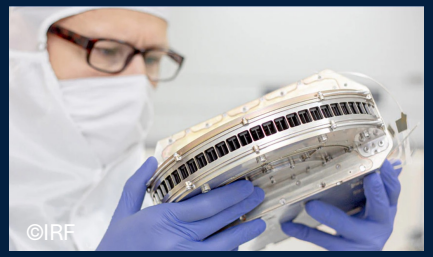


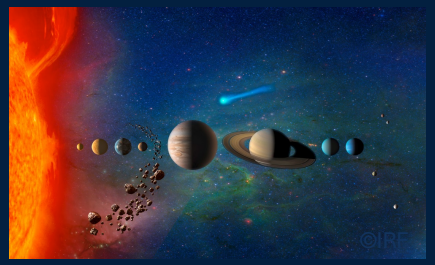




Research – Space Campus



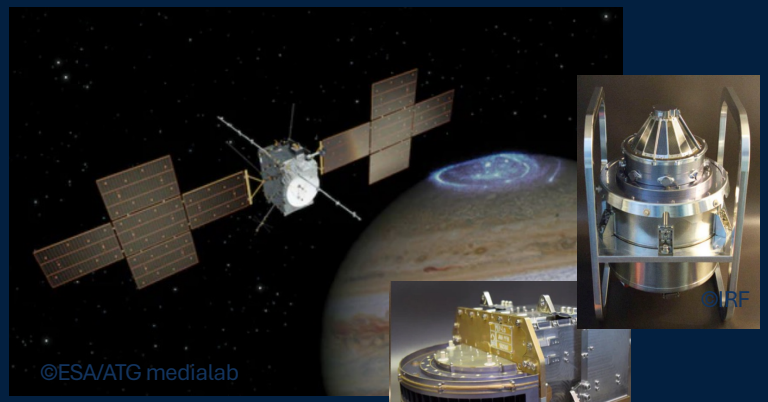




Research programmes at IRF

- Space Plasma Physics
- Solar terrestrial and atmospheric research
- Solar system physics and space technology
- Observatory activities

- Instrument development



Research programmes at LTU

- Atmospheric Science
- Space Systems
- Material Science
- Product innovation
- Fluid Mechanics
- Electronic Systems
- Robotics / Automation
- Tribology
- Computer science
- AI / Machine Learning
- ... and more

Education – Space Campus







- **Education and training at Luleå University of Technology (LTU)**
  - 5-year Master's Programme in Space Engineering
  - 2-year International Master's Programme in Space Science and Technology
  - 2-year International Master's Programme in Spacecraft Design
- **LTU Graduate School of Space Technology since 2001**
  - Next round will be national
- **Rexus / Bexus programme**
  - Rocket and Balloon Experiments for University Students

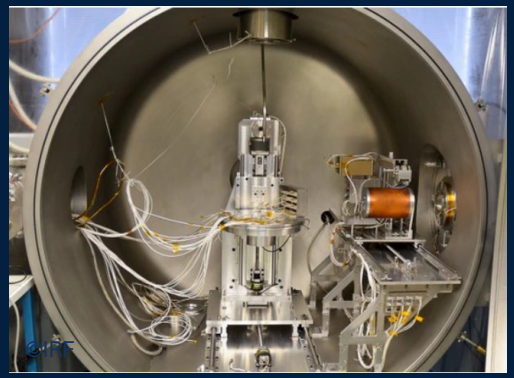




Space High School
with a space technology profile

Test and demo capabilities – Space Campus





SPACE LAB
Swedish Institute of Space Physics Kiruna

LULEA UNIVERSITY OF TECHNOLOGY

- Clean rooms
- Radiation testing
- Vibration testing
- Solar simulator
- Vacuum facilities
- Calibration facility
- Friction-less Air-bearing Table
- Horizontal rocket engine test beds
- Balloon payload preparation





ACS – The Gateway to Swedish Aerospace Business



AEROSPACE
CLUSTER
SWEDEN

75

Member Companies (and organizations)

AEROSPACE
CLUSTER
SWEDEN

Partnerföretag

SAAB

SSC Space

beyond gravity

EUROPEAN CLUSTER
COLLABORATION PLATFORM

One national cluster. Three regional nodes.

WEST

Trollhättan

Propulsion & industry

EAST

Linköping

Aerospace systems

NORTH

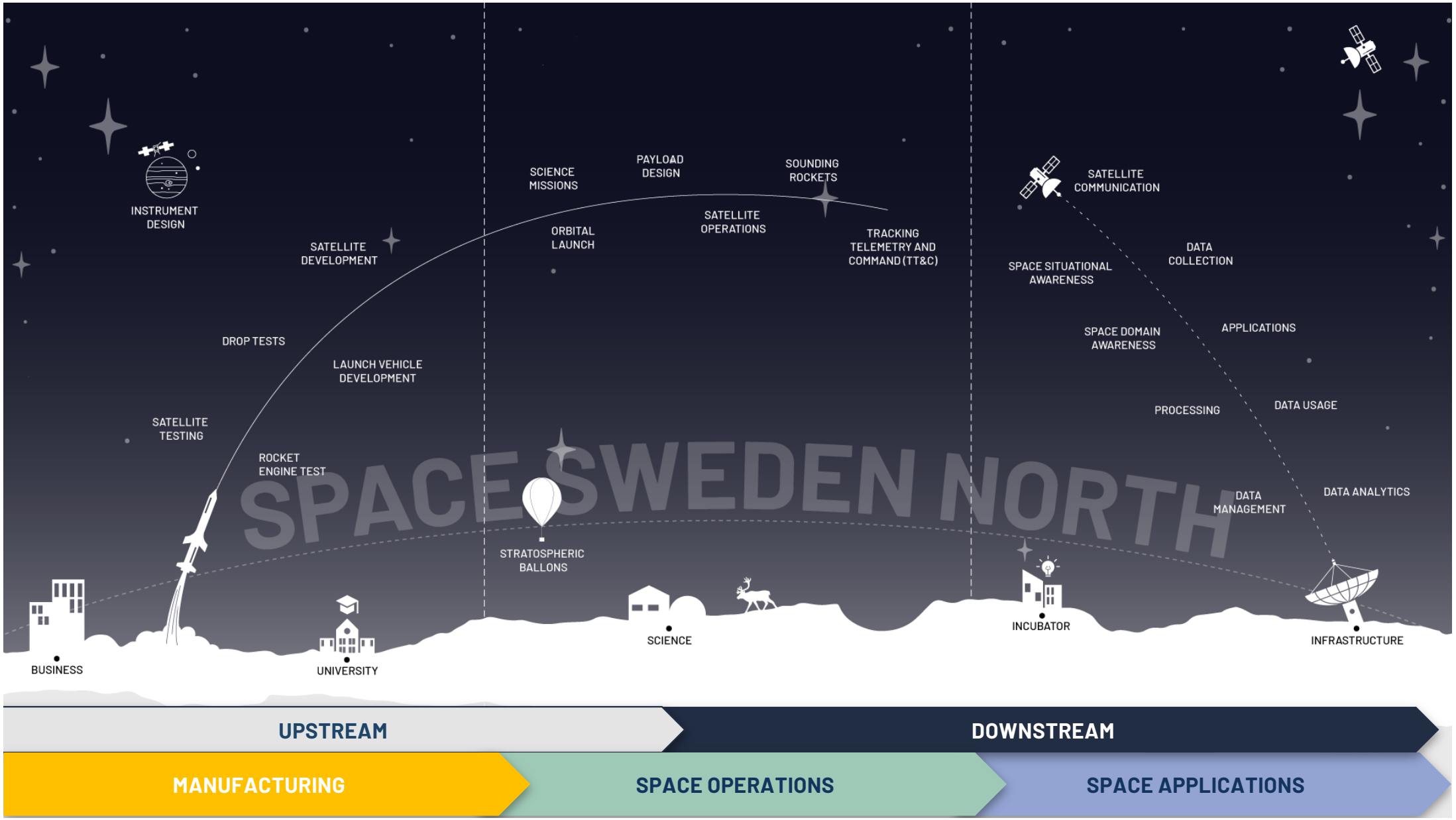
Kiruna / Luleå / Skellefteå

Space & Arctic opportunities

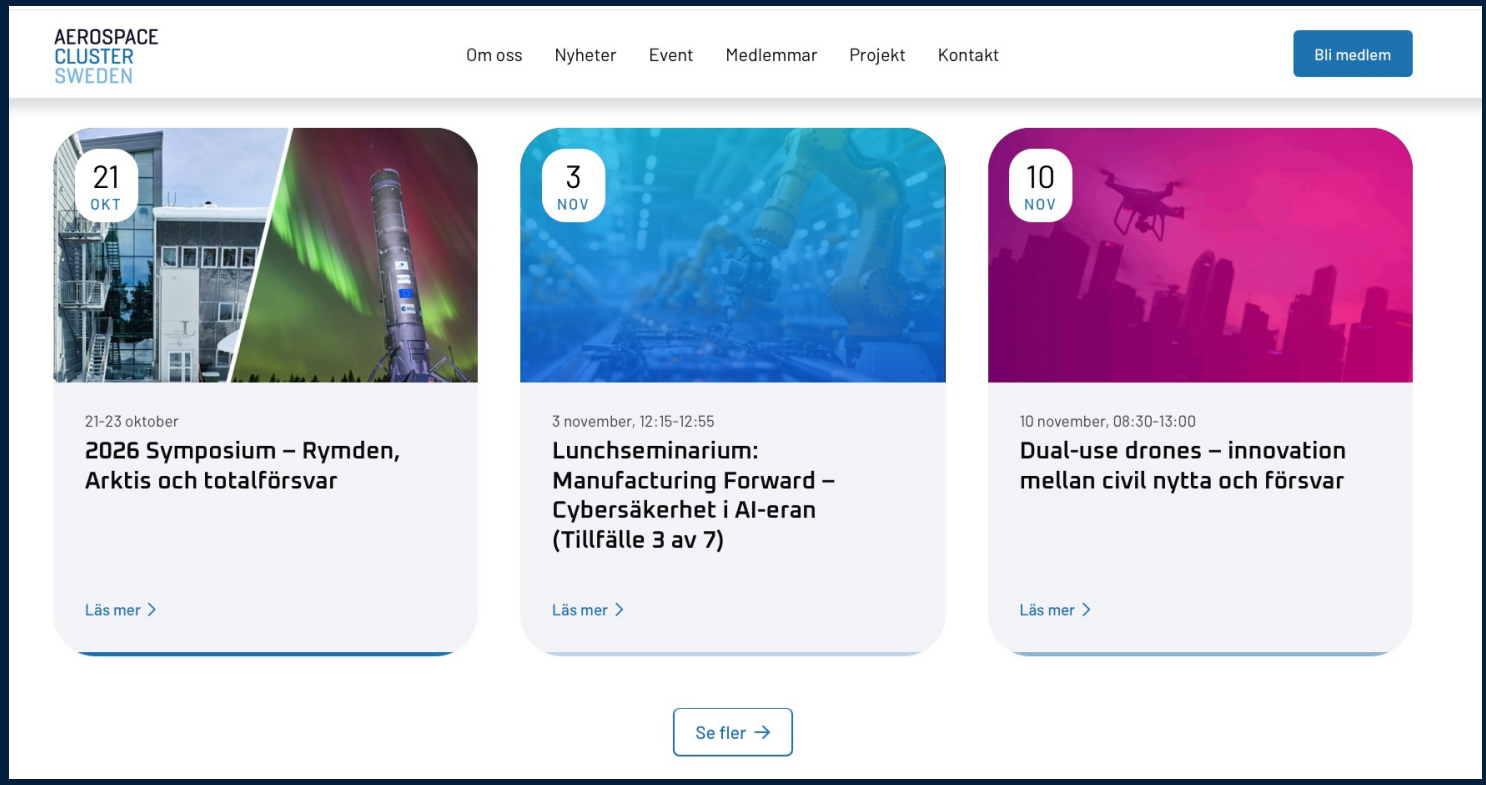

Murmansk
Rovaniemi
Luleå
Sweden
Oulu
Arkhangelsk
Umeå
Kokkola
Trondheim
Östersund
Vaasa
Härnösand
Finland
Joensuu
Jyväskylä
Petrozavodsk
Tampere
Norway
Gävle
Bergen
Turku
Oslo
Helsinki
Saint Petersburg
Tallinn
Stockholm
Örebro
Vologda
Stavanger
Estonia
Veliky Novgorod
Pskov
Yaroslavl
Inverness
Aberdeen
Aalborg
Ivanovo
SCOTLAND
North Sea
Baltic Sea
Latvia
Tver
Edinburgh
Vladimir
Denmark
Moscow
Newcastle upon Tyne
Lithuania
Vitsebsk
Kaliningrad
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ORBITAL LAUNCH
SATELLITE OPERATIONS
TRACKING TELEMETRY AND COMMAND (TT&C)
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DATA COLLECTION
SPACE DOMAIN AWARENESS
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INCUBATOR
INFRASTRUCTURE
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MANUFACTURING
SPACE OPERATIONS
SPACE APPLICATIONS

https://aerospaceclustersweden.com



Connecting companies, capabilities and opportunities

NETWORKS & GROWTH

INSIGHTS & PERSPECTIVES

KNOWLEDGE & SKILLS



Aerospace and defence share critical capabilities

Advanced technologies

Qualified supply chains

People and know-how





Photo: Aurora Space

Collaboration – our core

Projects/studies

- Swedish Space Innovation Collaboration (SSIC / ESA BIC Sweden)
- Aurora Space Economy Ecosystem (Interreg project Sv/Fi)
- Space West (VG)
- SMART 6GSAT (SSF Research Centre)
- UNIVERSEH
- Kiruna - European Capital of Culture 2029
- COLLAB Space
- … and more

Clusters

- S3 Access to Space (RN)
- Aerospace Cluster Sweden (ACS)
- Swedish Aerospace Industries (SAI)
- Swedish Aerospace Research Centre (SARC)
- European Aerospace Cluster Partnership (EACP)
- *… and more*

SPACE SWEDEN **NORTH**

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