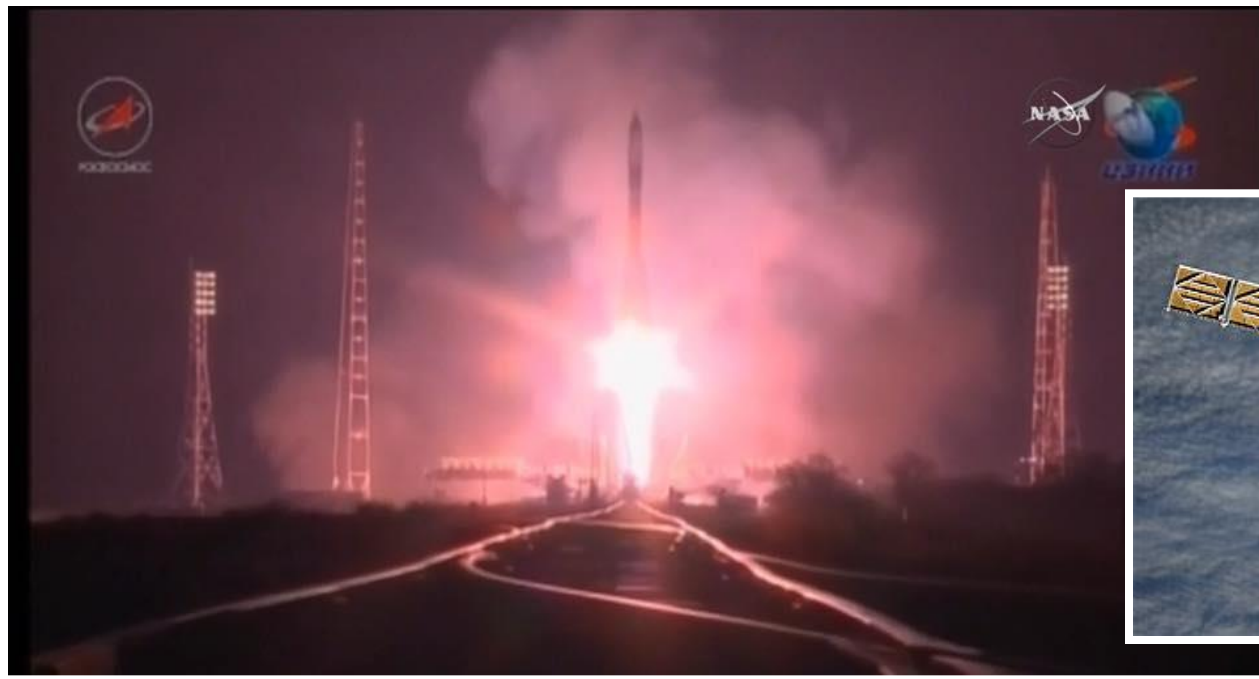
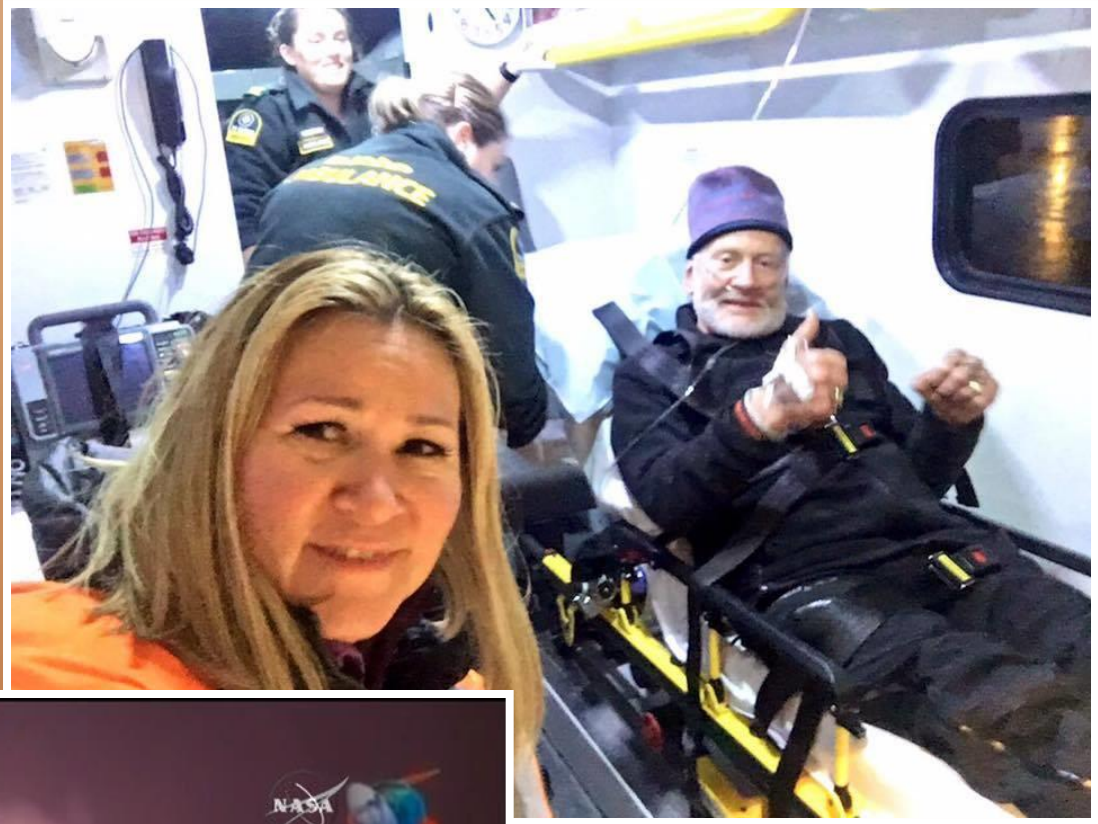
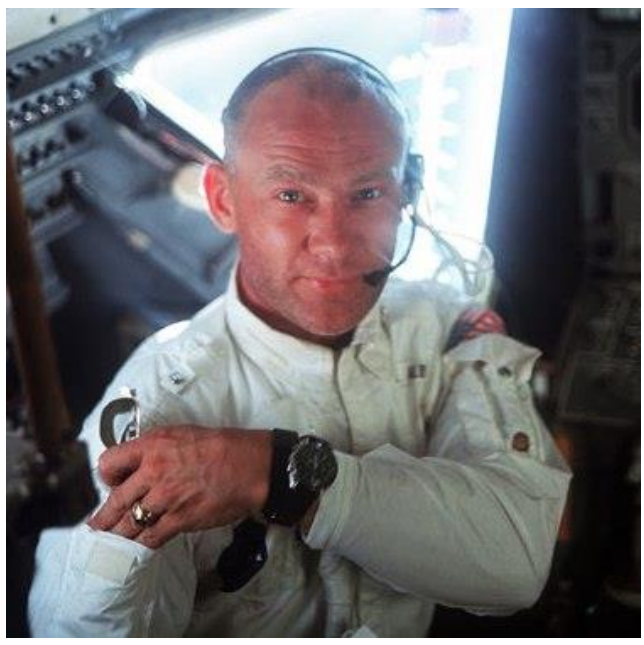
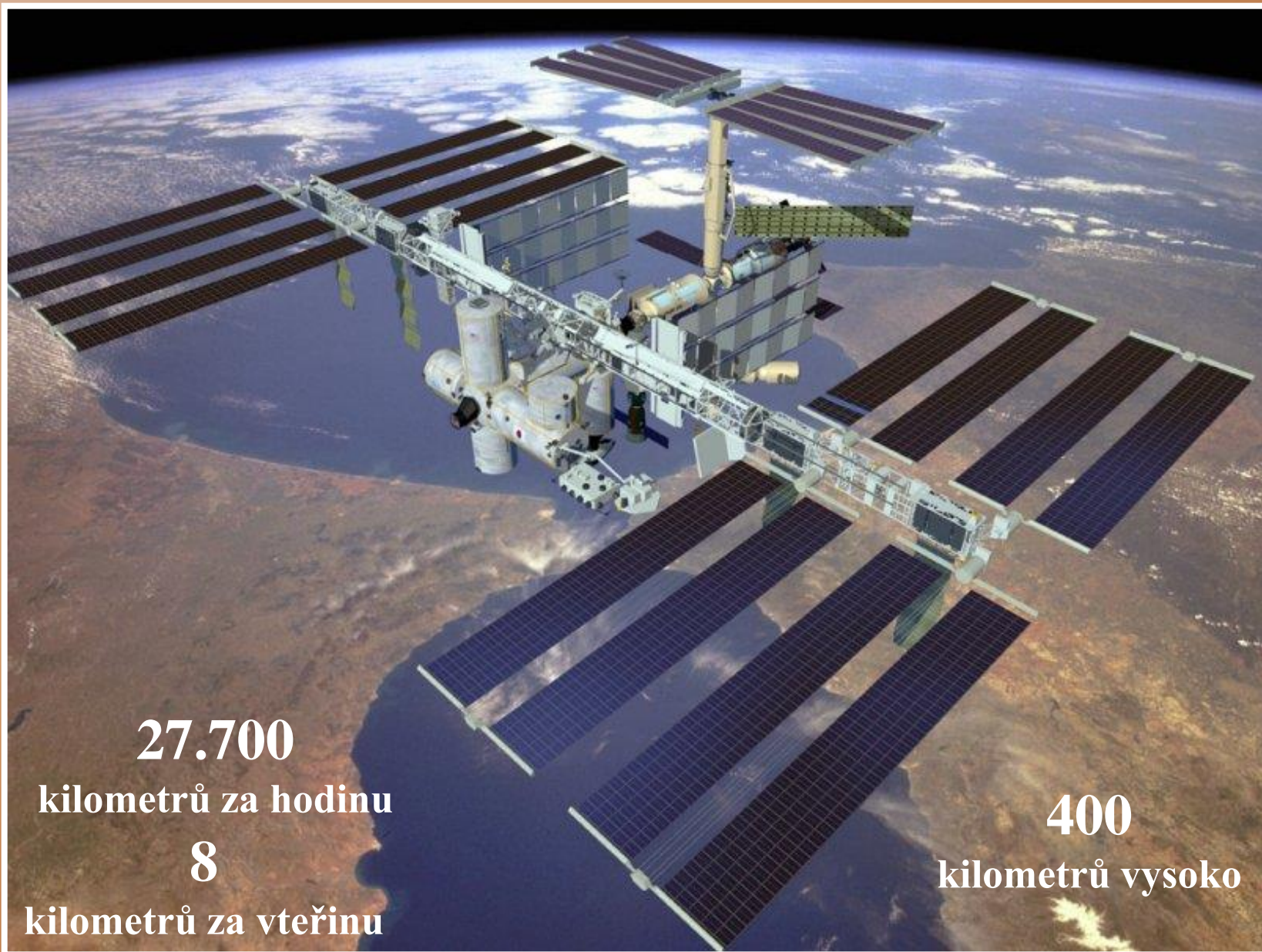


ŽIVOT NA KOSMICKÉ STANICI



Milan HALOUSEK
Česká kosmická kancelář





27.700

kilometrů za hodinu

8

kilometrů za vteřinu

400

kilometrů vysoko

Mezinárodní kosmická stanice ISS



SALJUT 1-7
(1971 – 1991)



SKYLAB
(1973-1979)

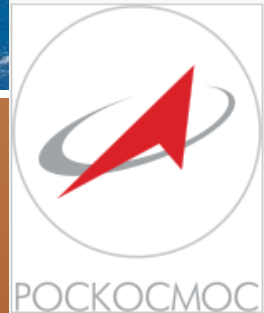
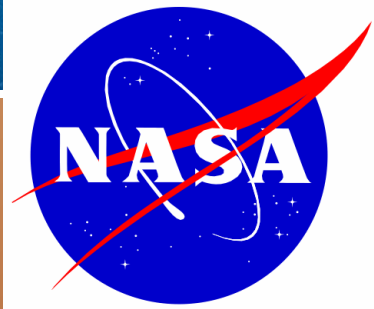
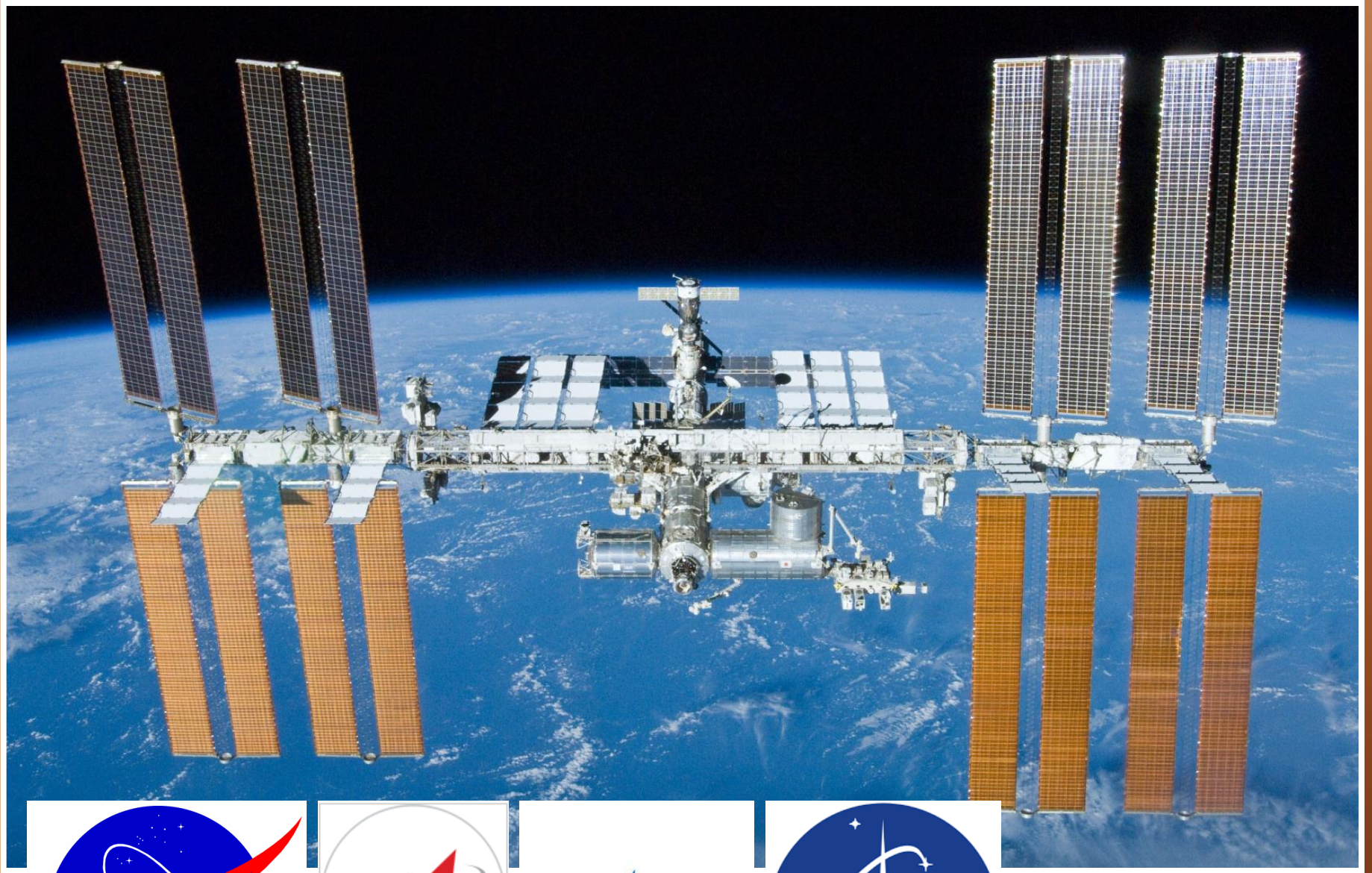


MIR (1986-2001)

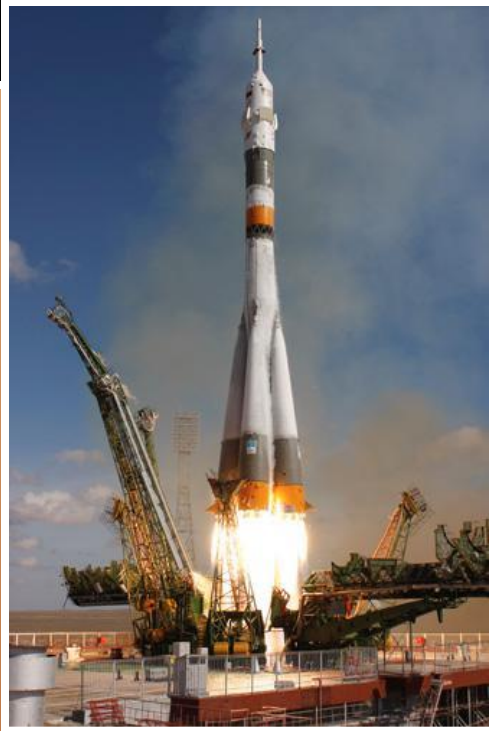
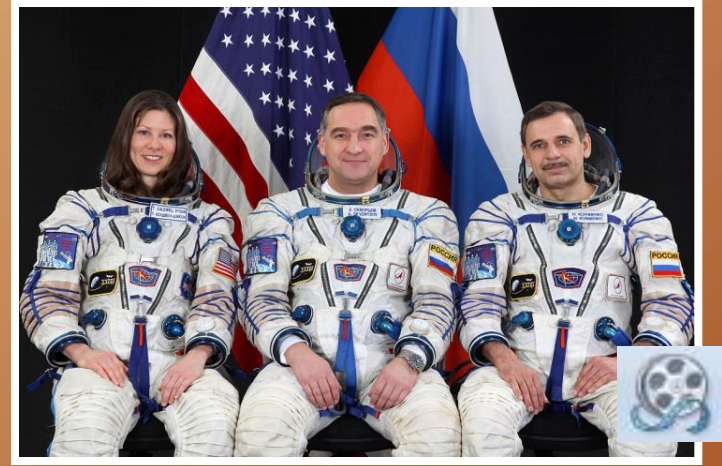
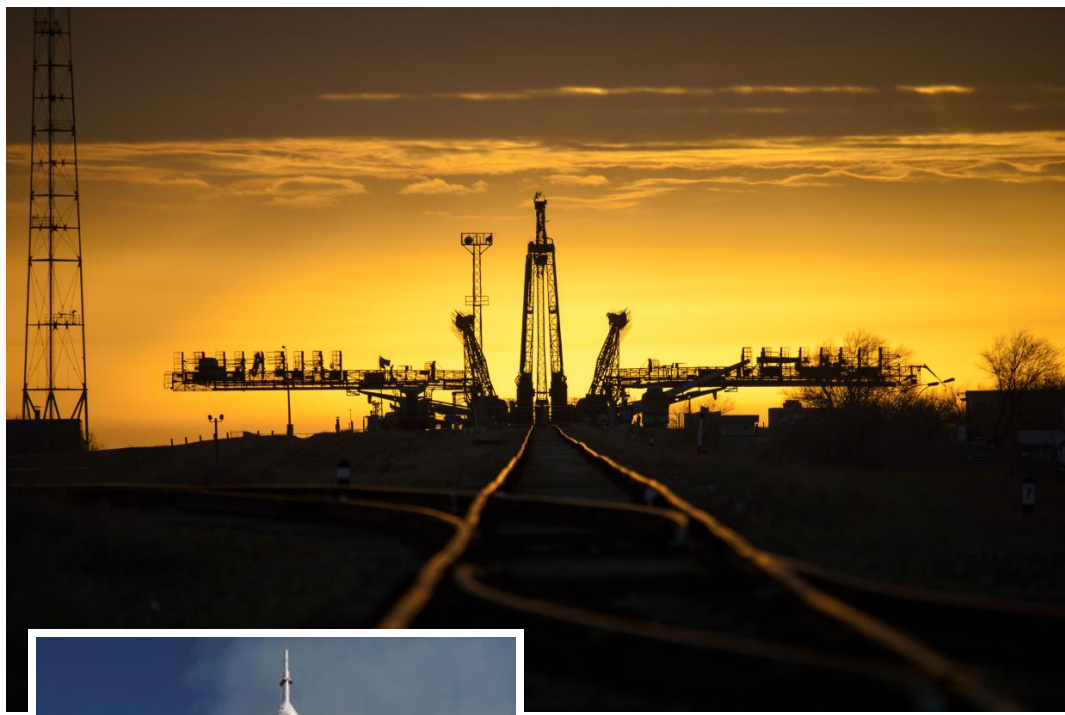
**INTERNATIONAL SPACE
STATION** (od 1998)

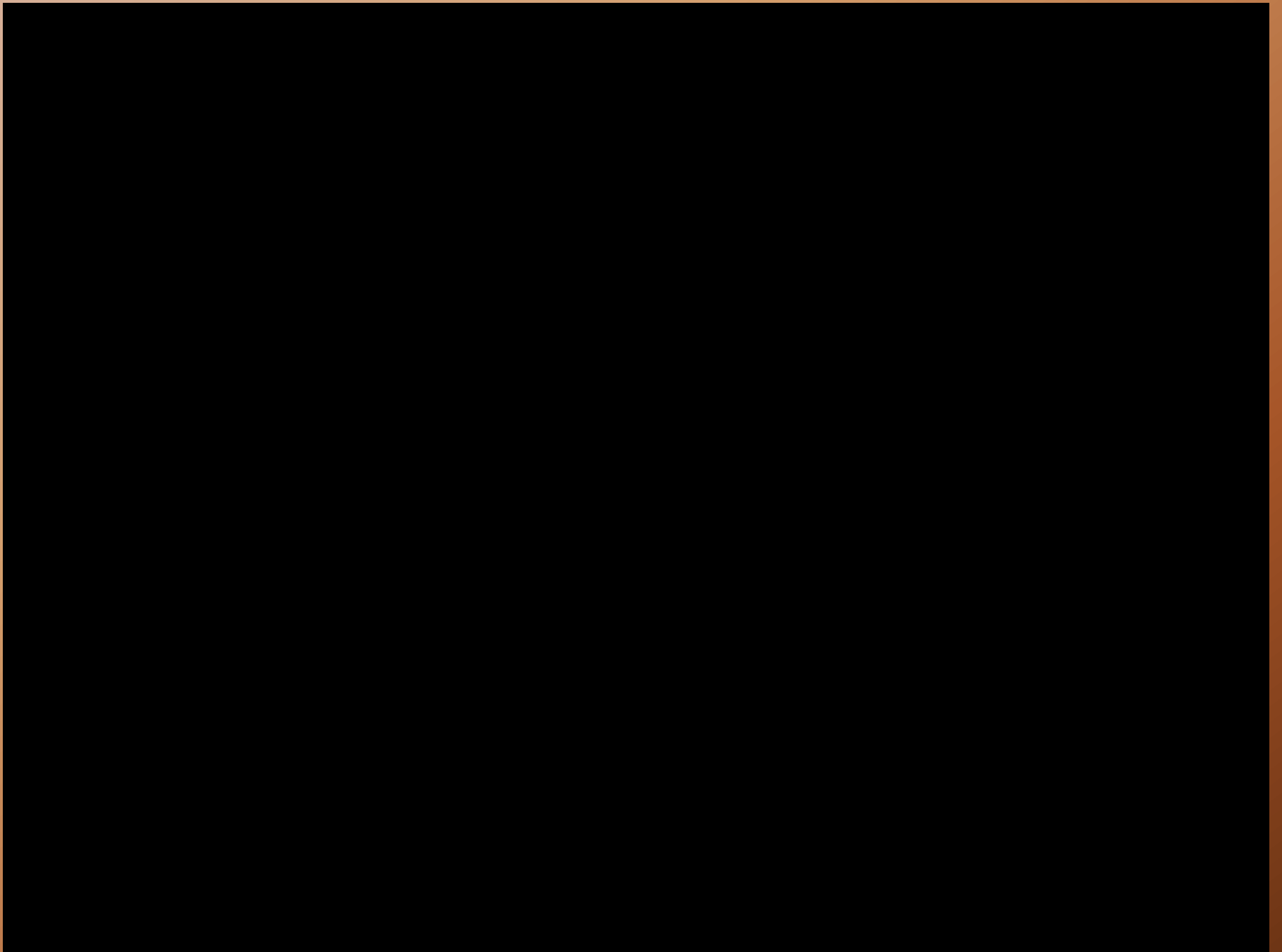


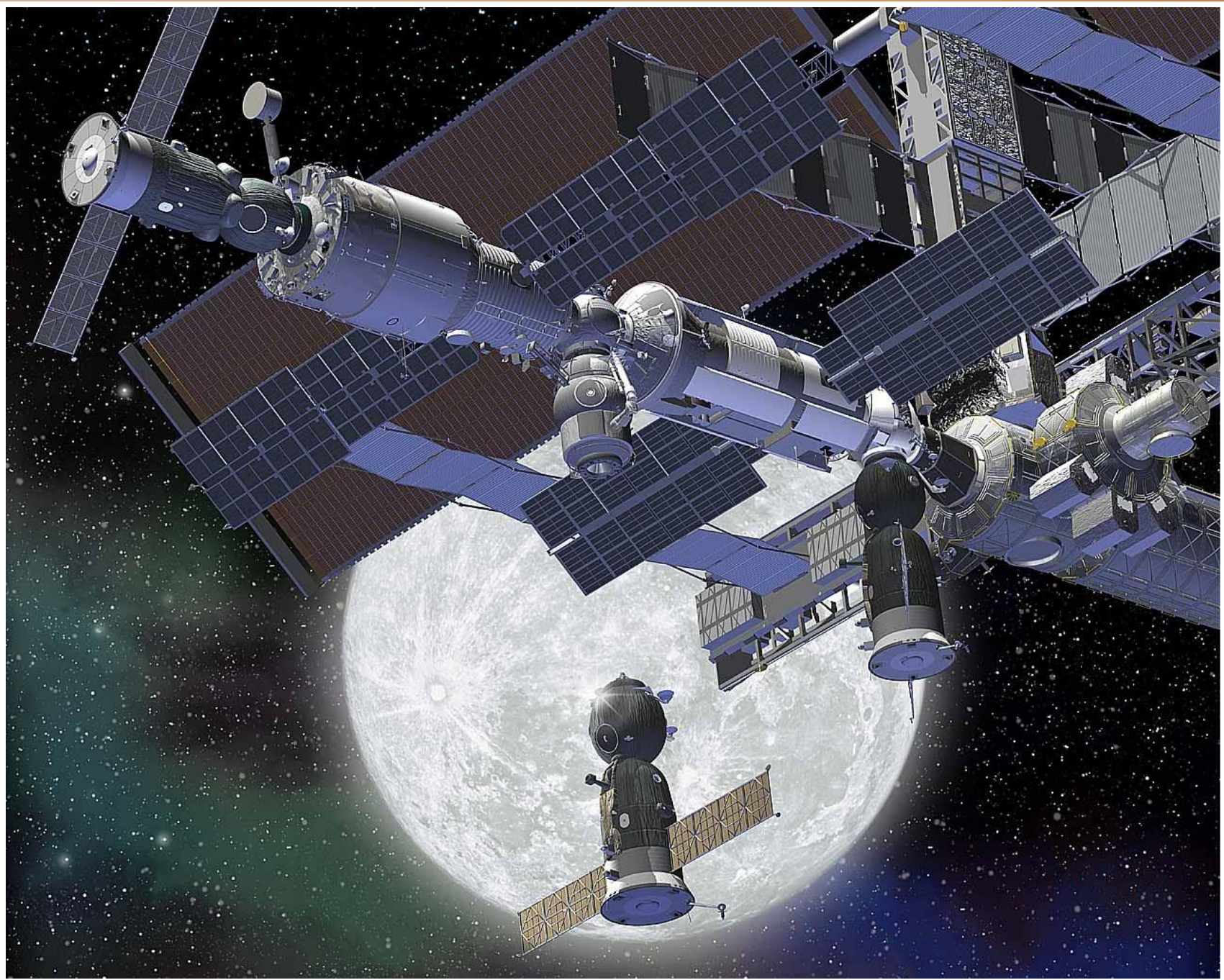


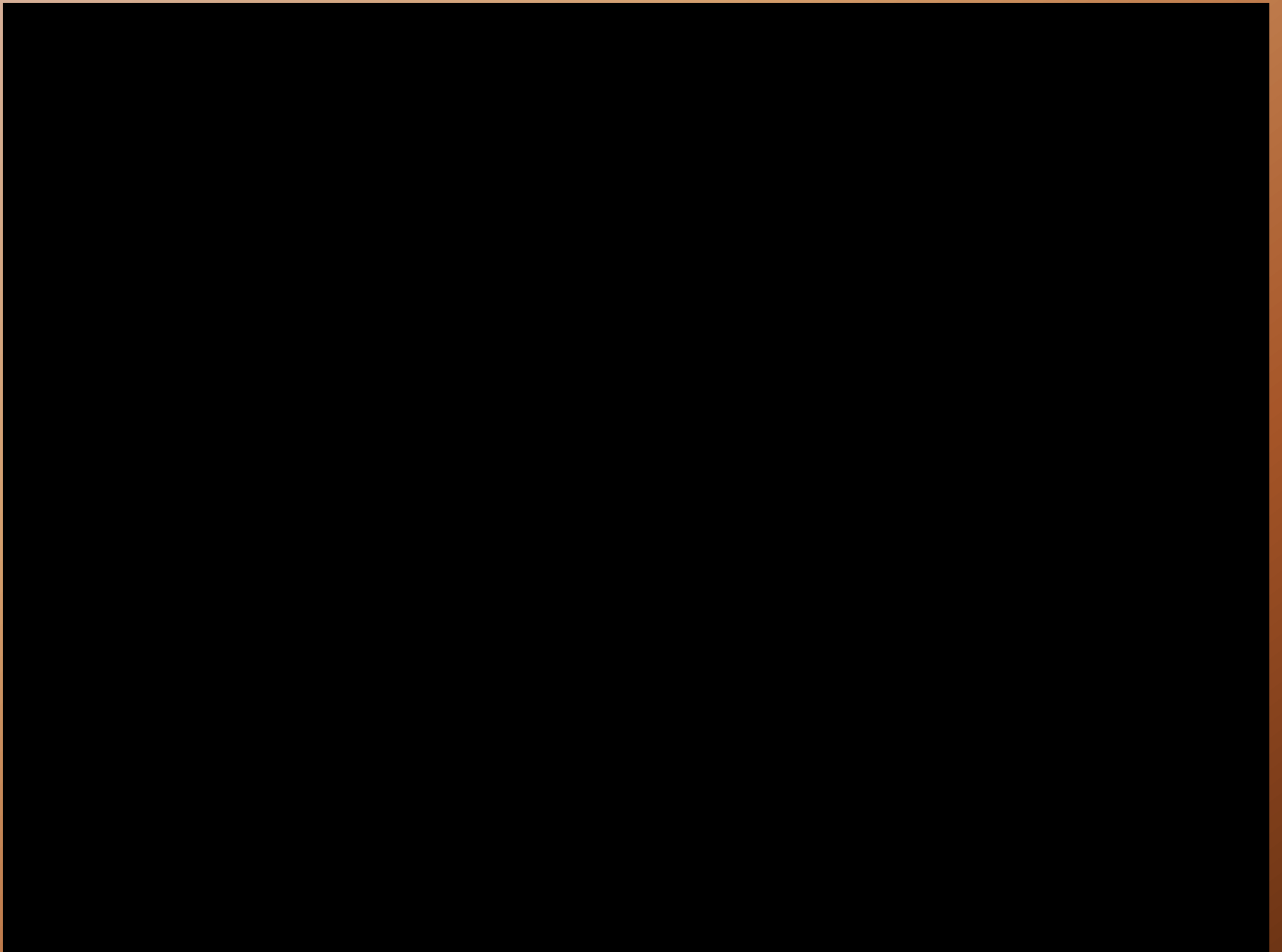
















A photograph of an astronaut in a green t-shirt and khaki pants working in a laboratory module on the International Space Station. The astronaut is smiling and looking towards the camera. In the foreground, there is a large circular window or porthole showing a laboratory setup with several yellow circular components. The background is filled with various scientific equipment and cables.

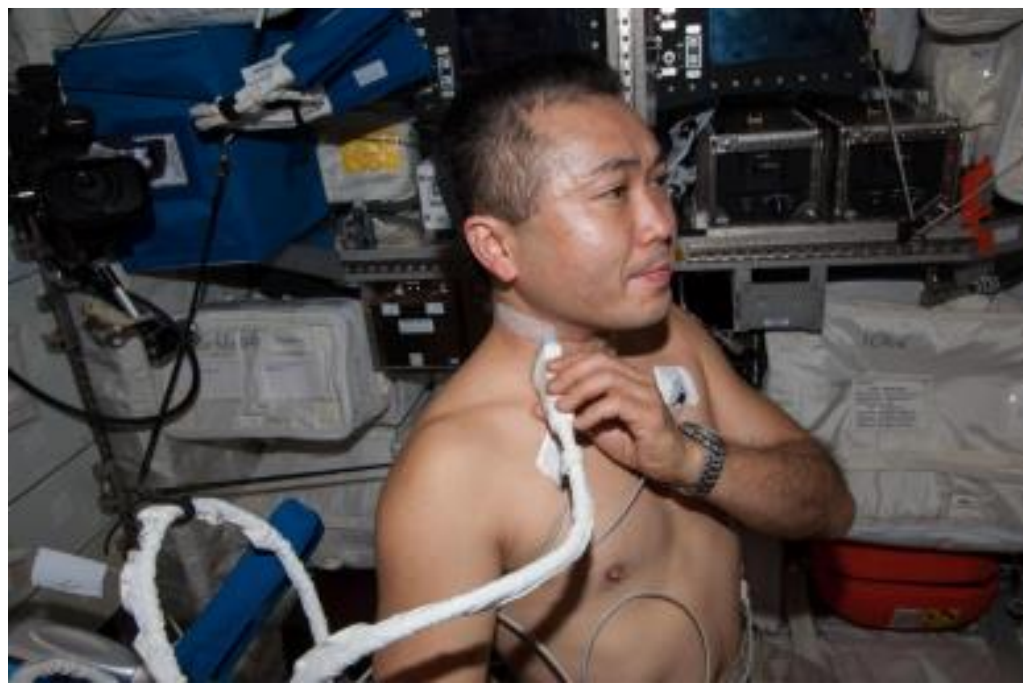
**Do současné doby cca 2.100
experimentů**

Věd.pracovníci z 95 zemí světa

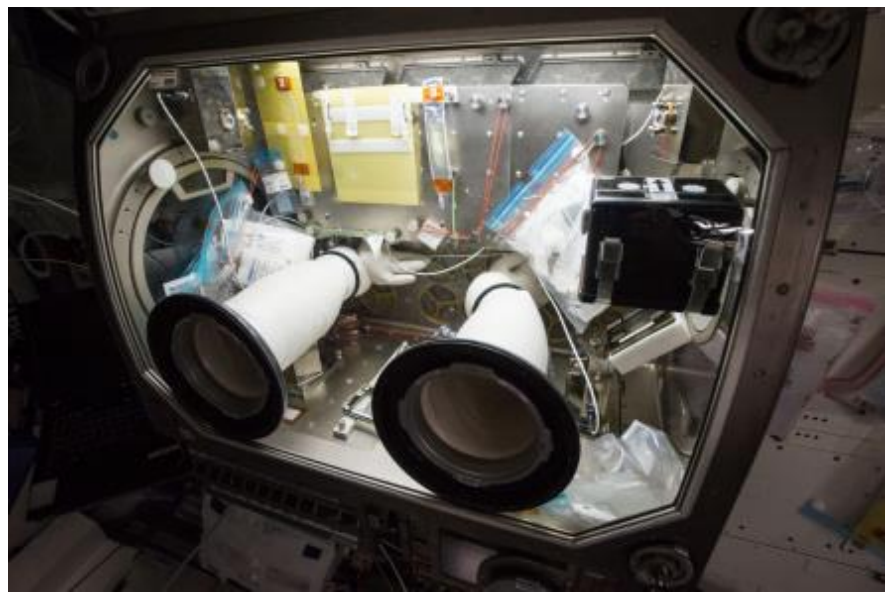
- * **Fyzikální vědy**
- * **Vědy o životě**
- * **Biologie**
- * **Fundamentální fyzika**
- * **Technologie**
- * **Technologické demonstrace**
- * **Robotika**
- * **Systémy podpory života**
- * **Astronomie**
- * **Astrofyzika**
- * **Sluneční fyzika**
- * **Pozorování Země**
- * **Telekomunikace**
- * **Navigace**

Věda na ISS

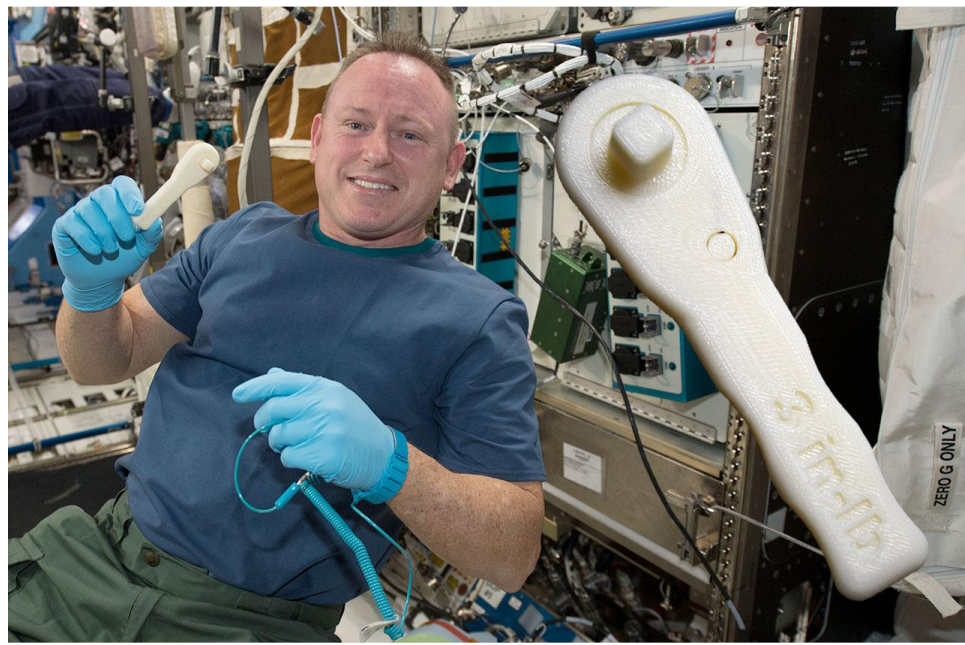
Lékařské výzkumy



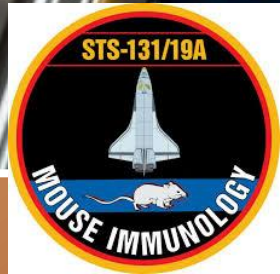
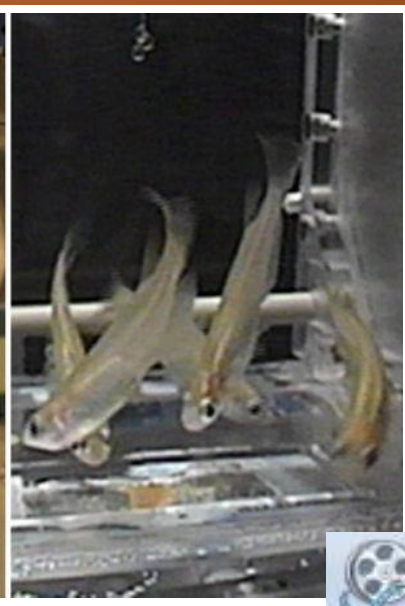
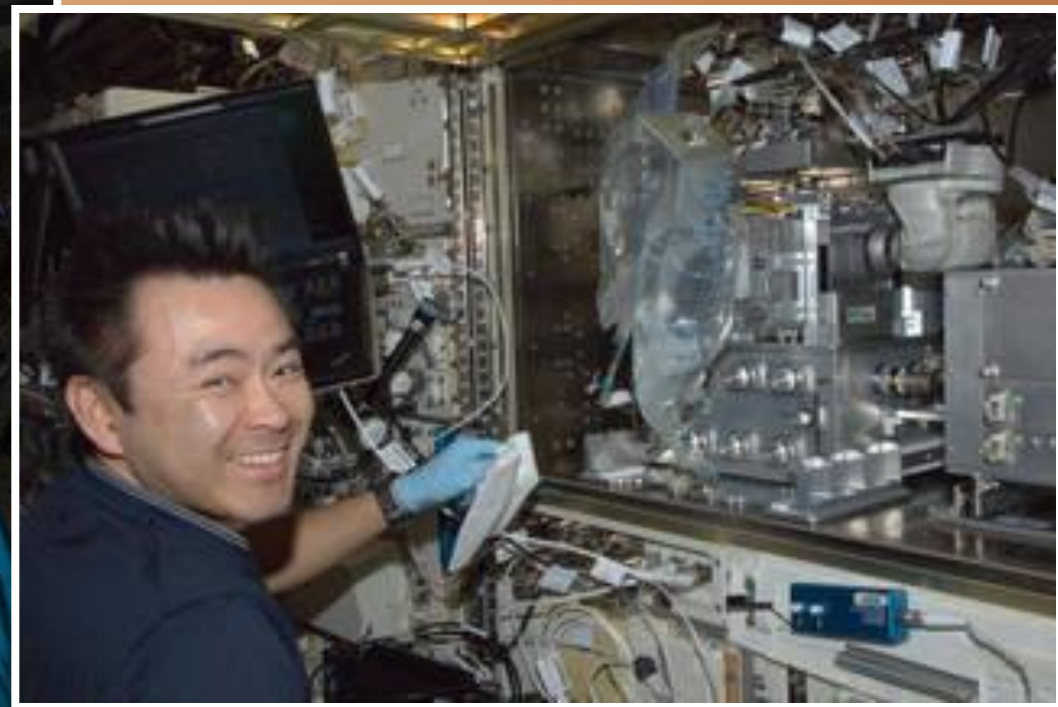
Materiálový výzkum

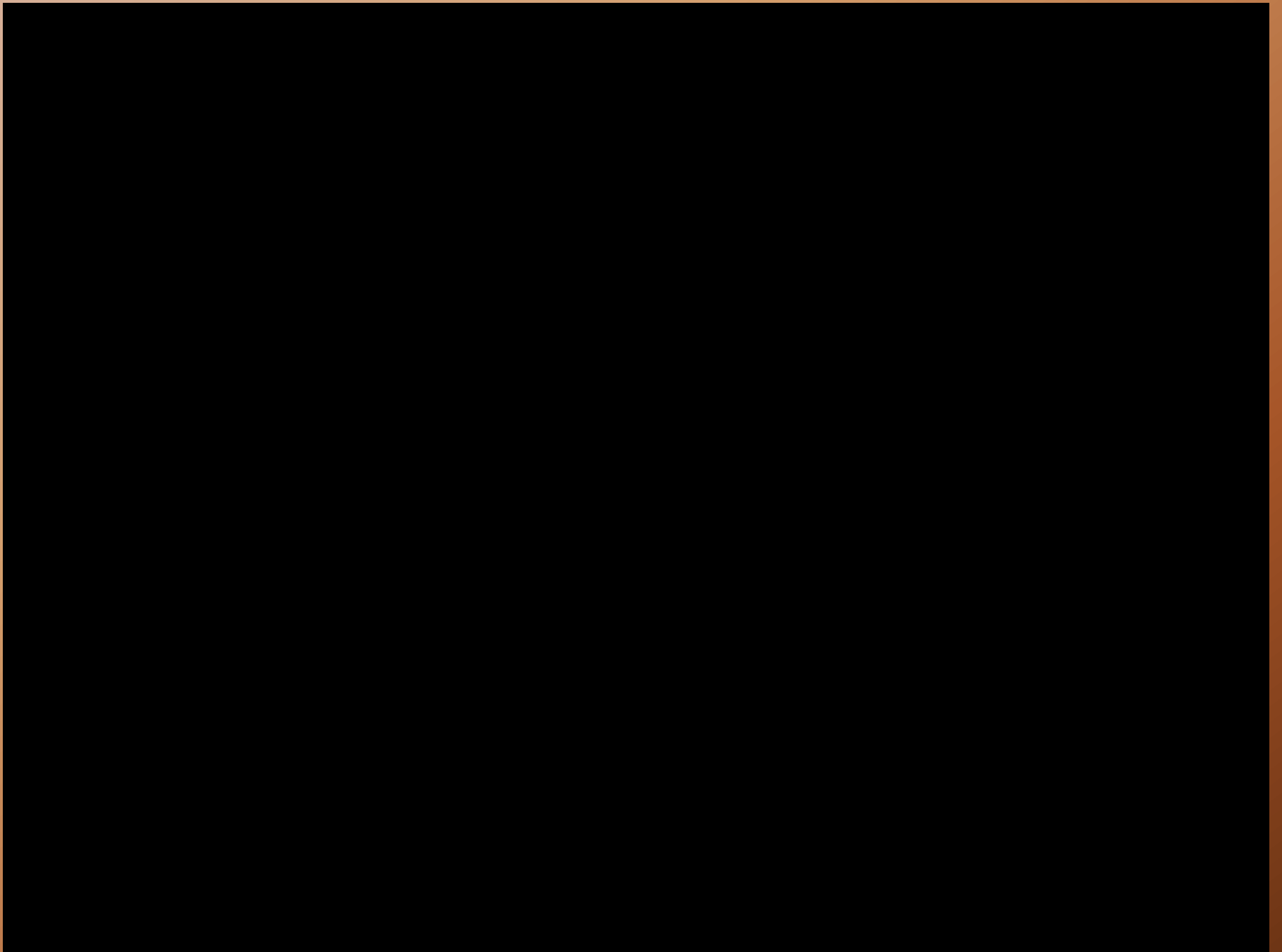


3D task



Výzkum živých organismů





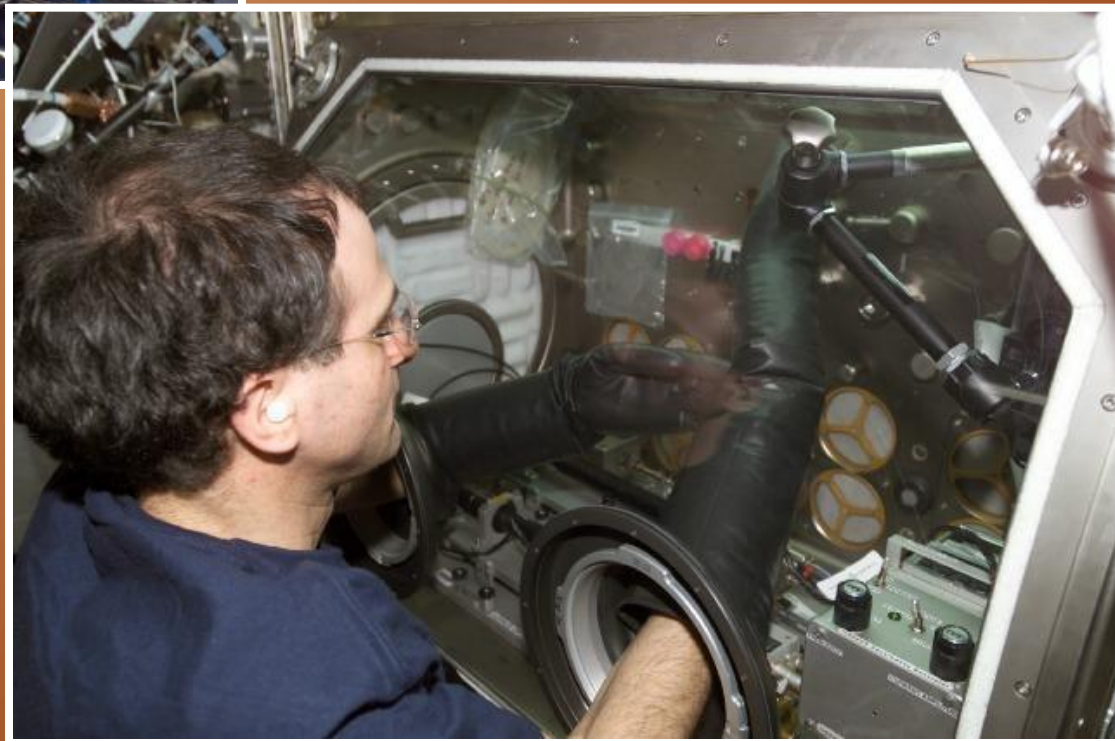
Růst rostlin ve stavu beztlíže

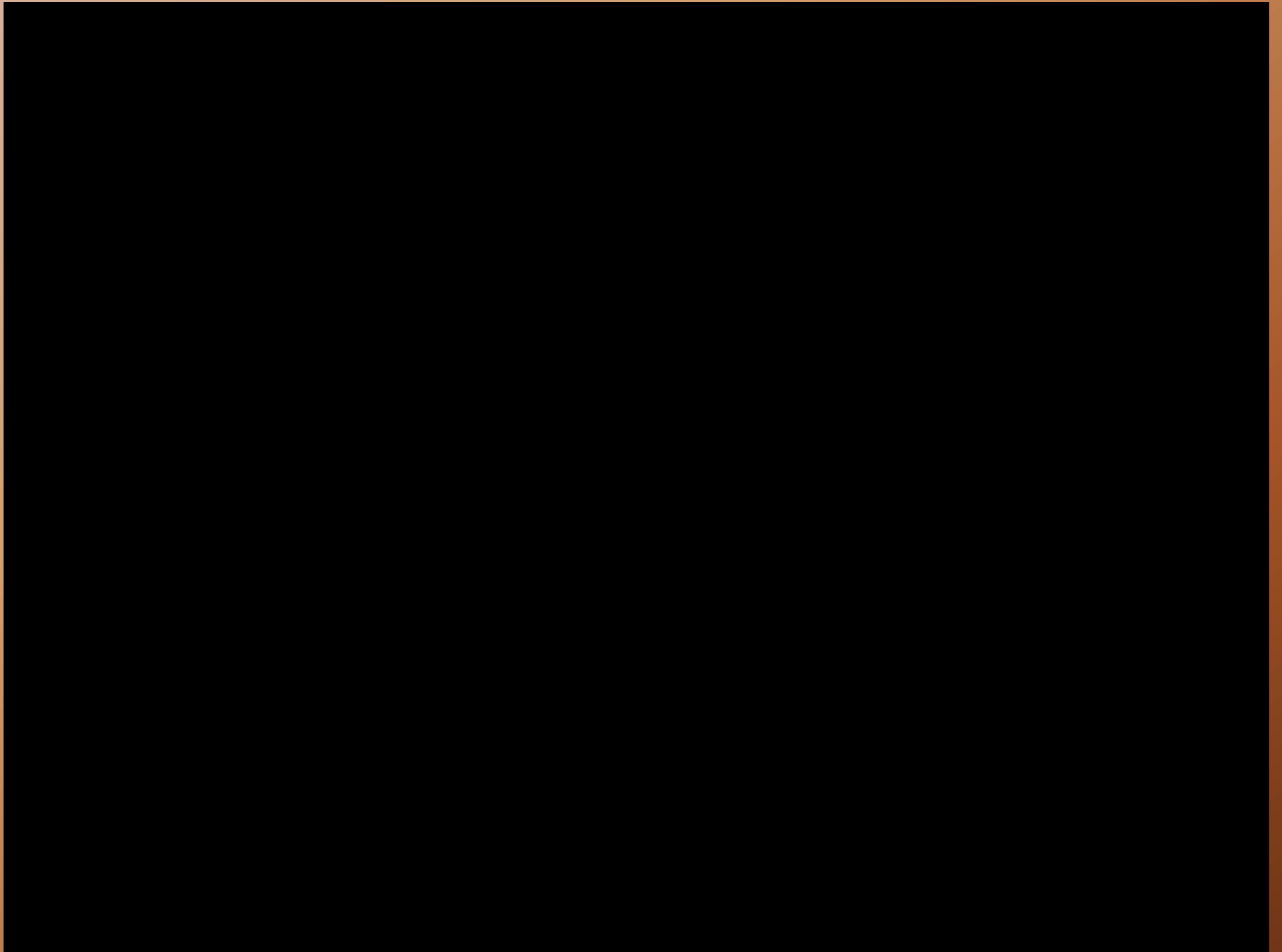


Popularizační programy - hudba

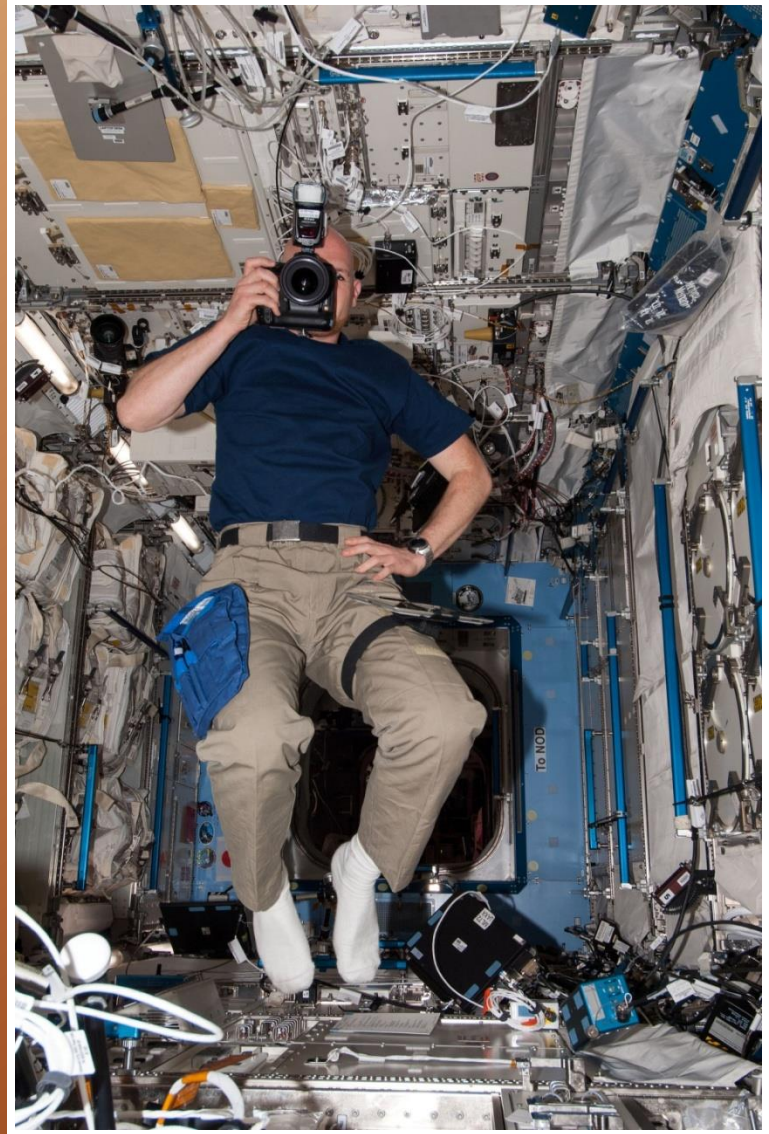
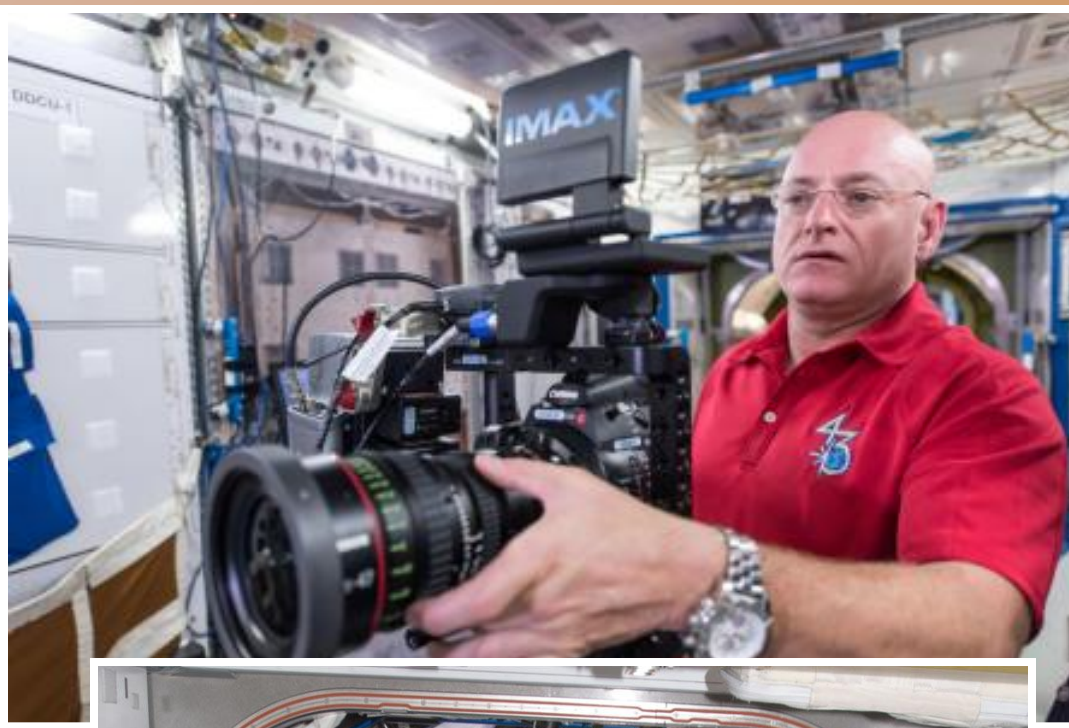


Výzkumné projekty



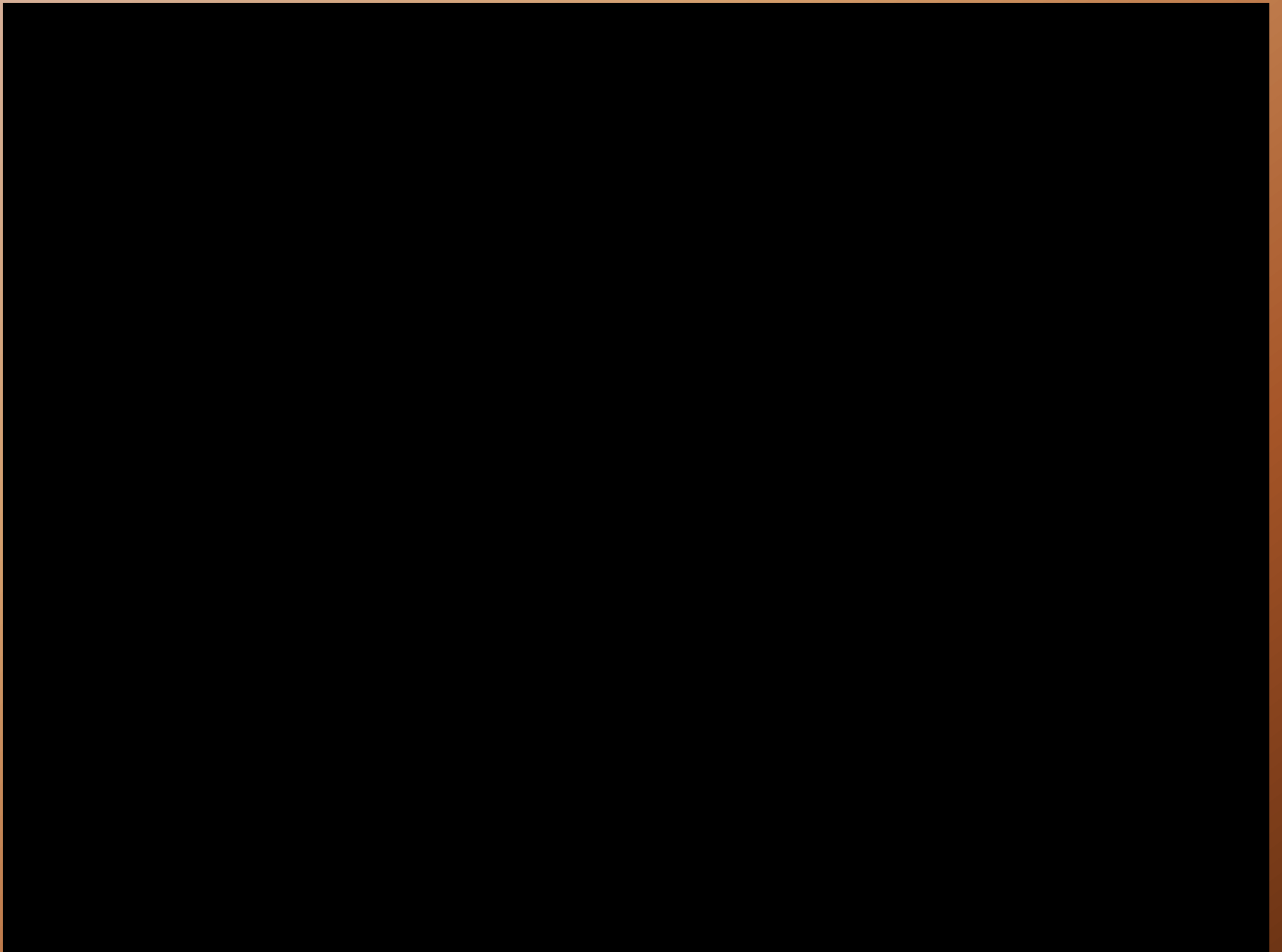


Fotografie, film

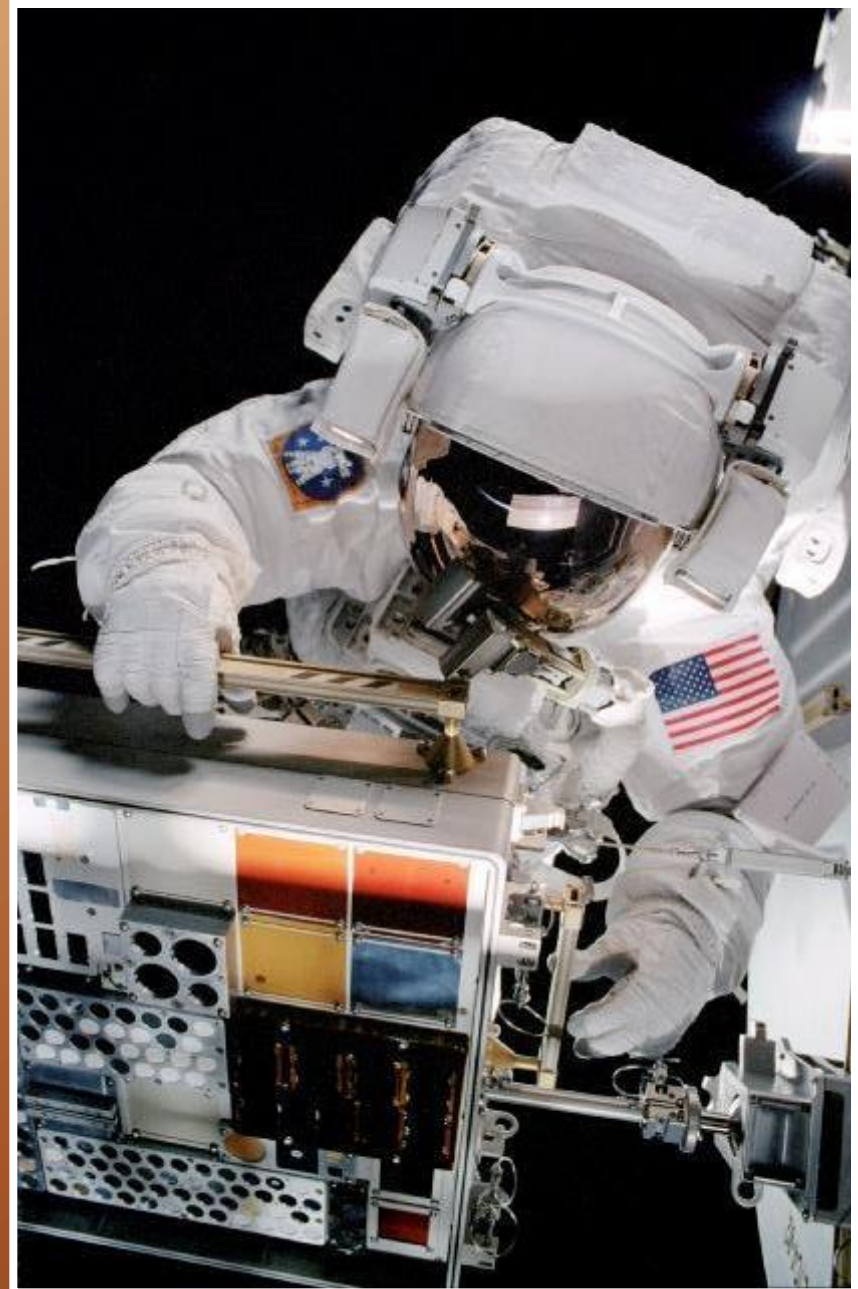
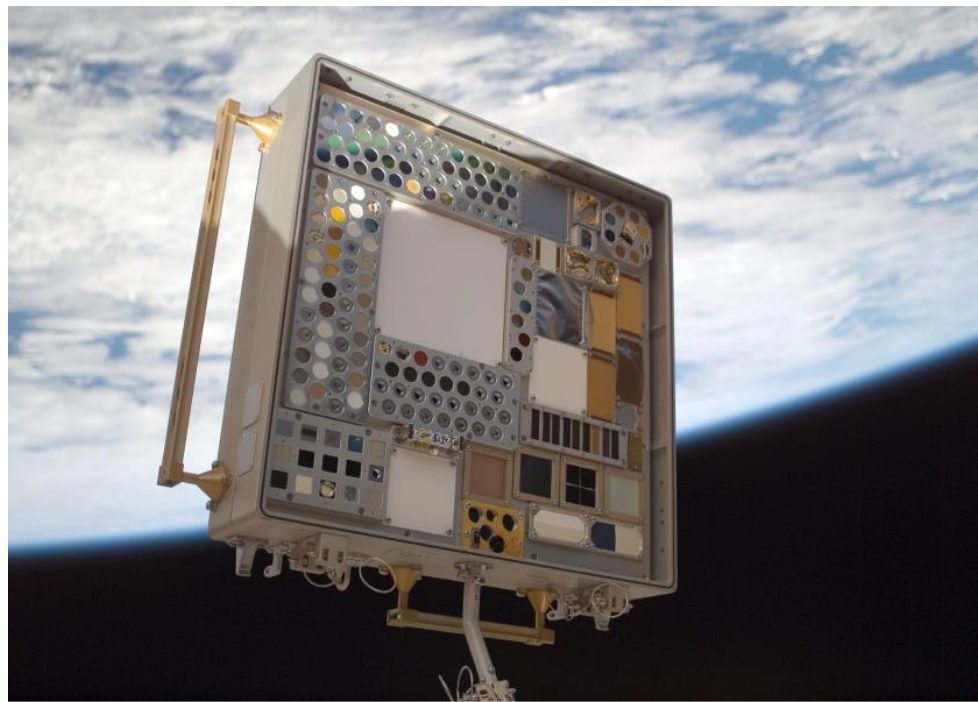


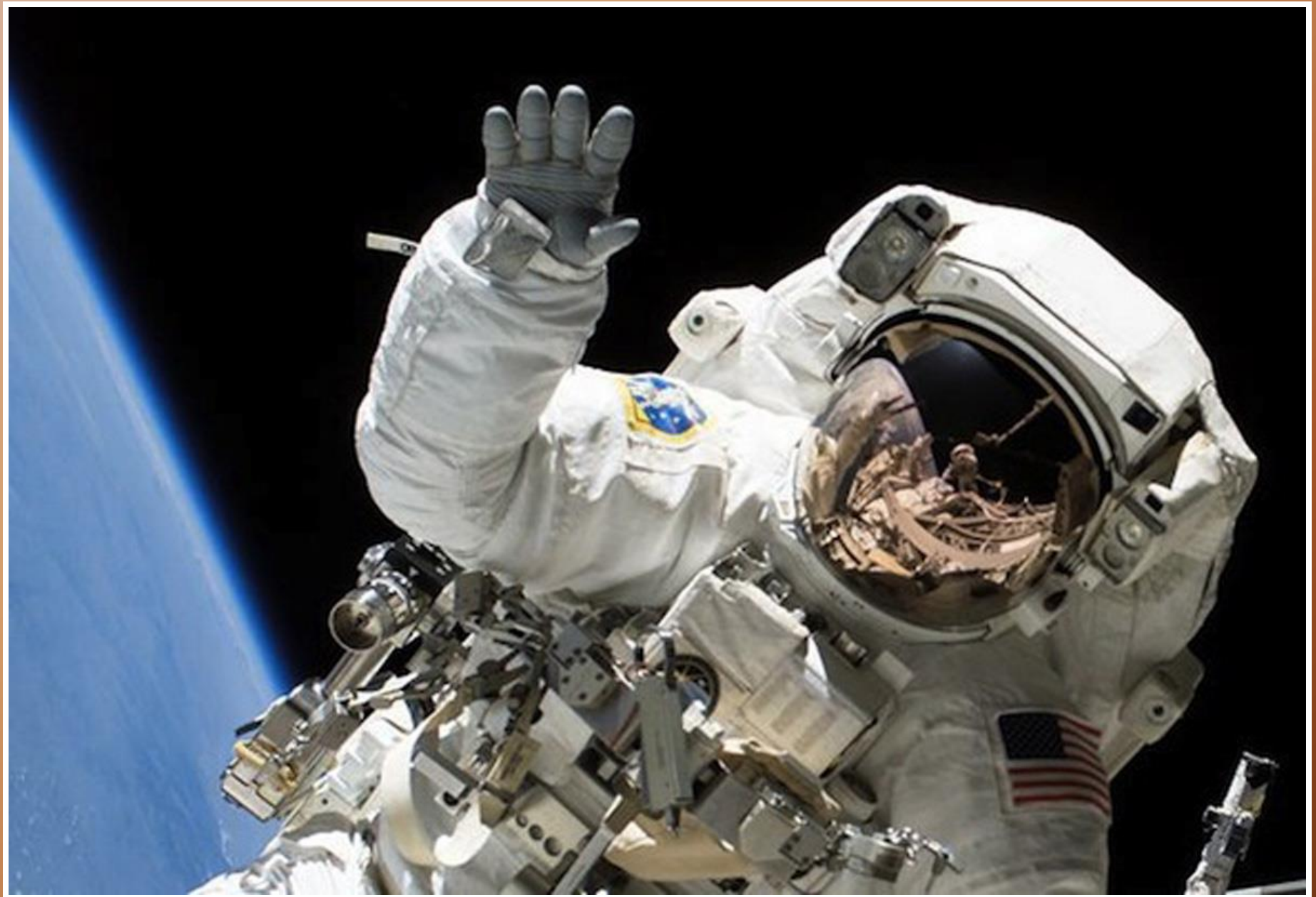
Robotika - Robonaut-2

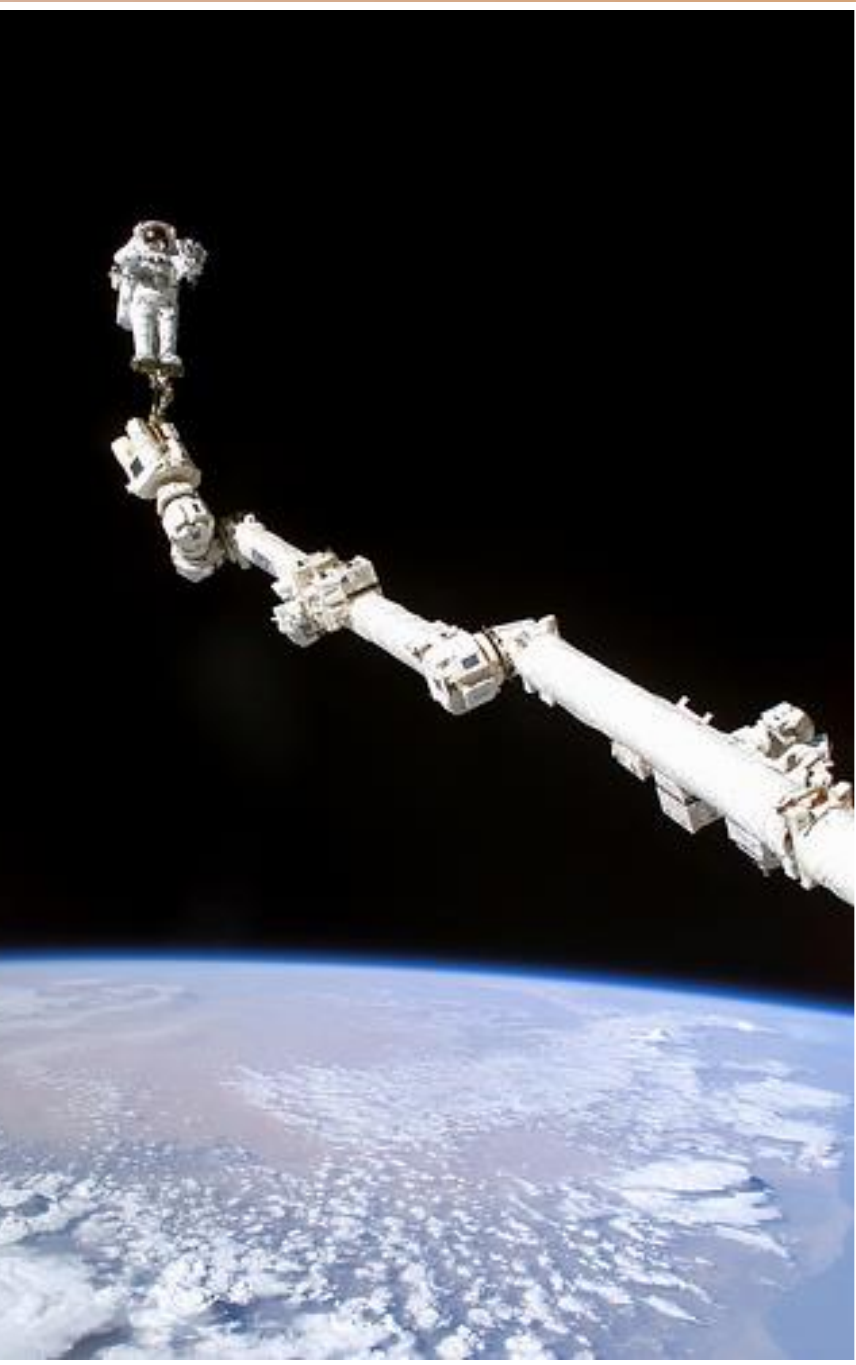


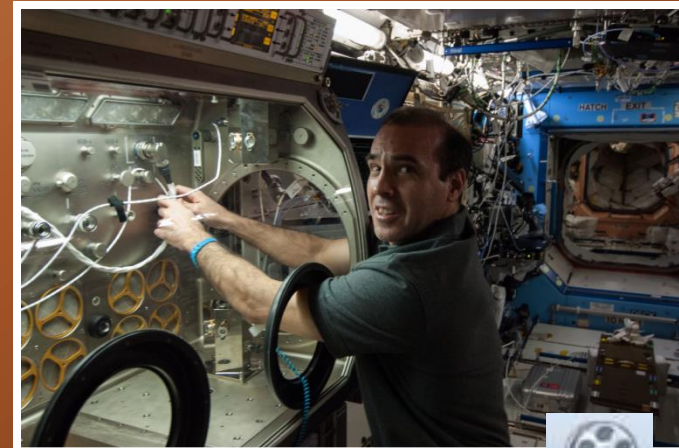
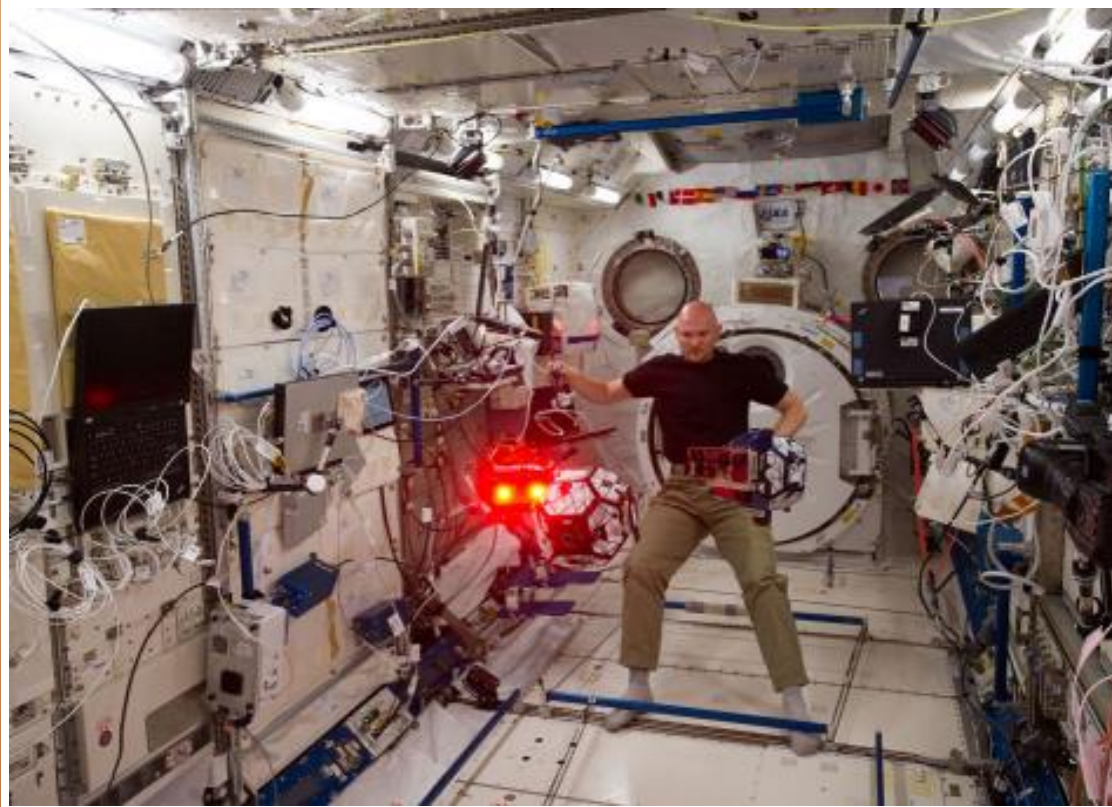


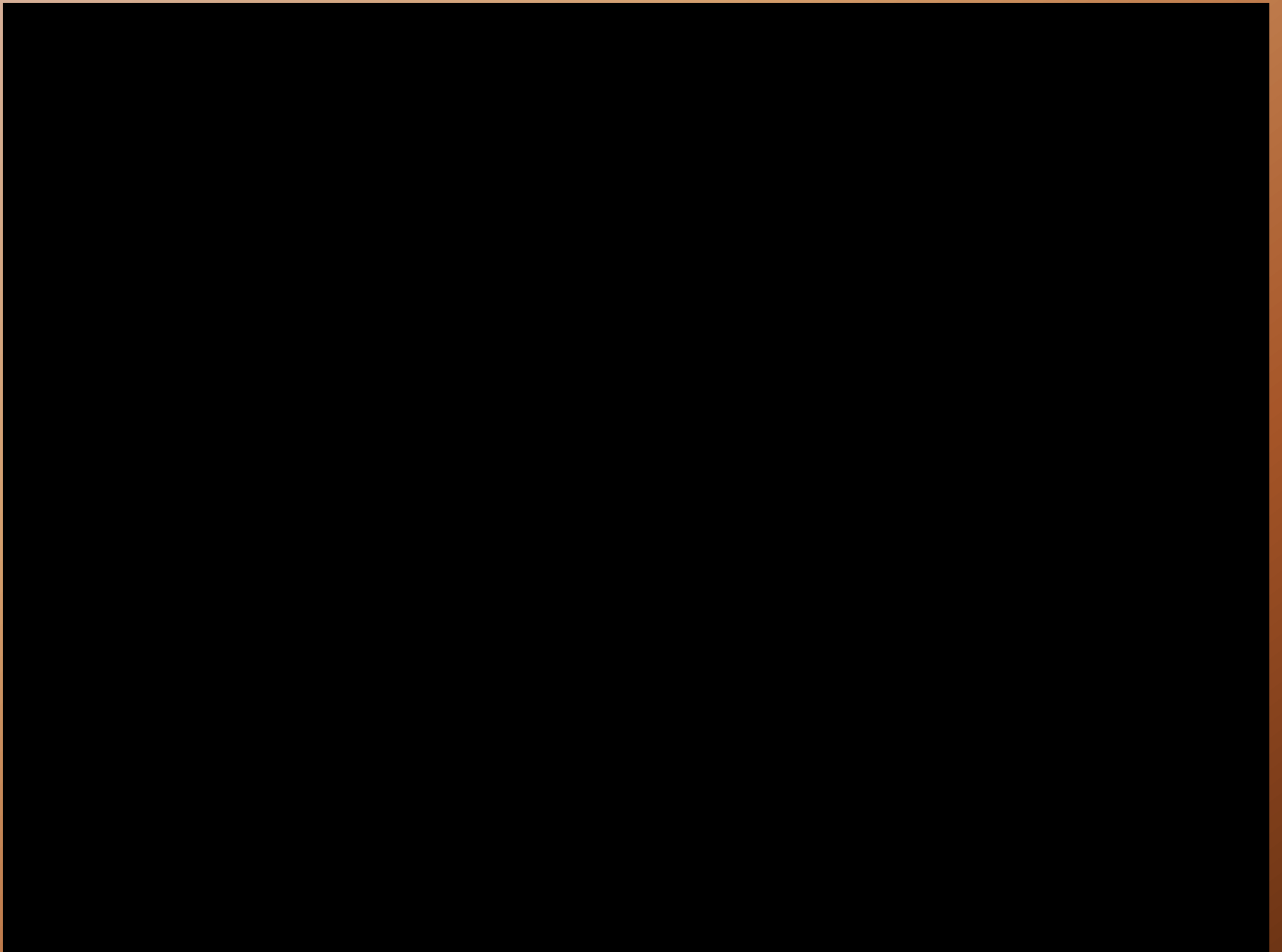
Dlouhodobé působení prostředí

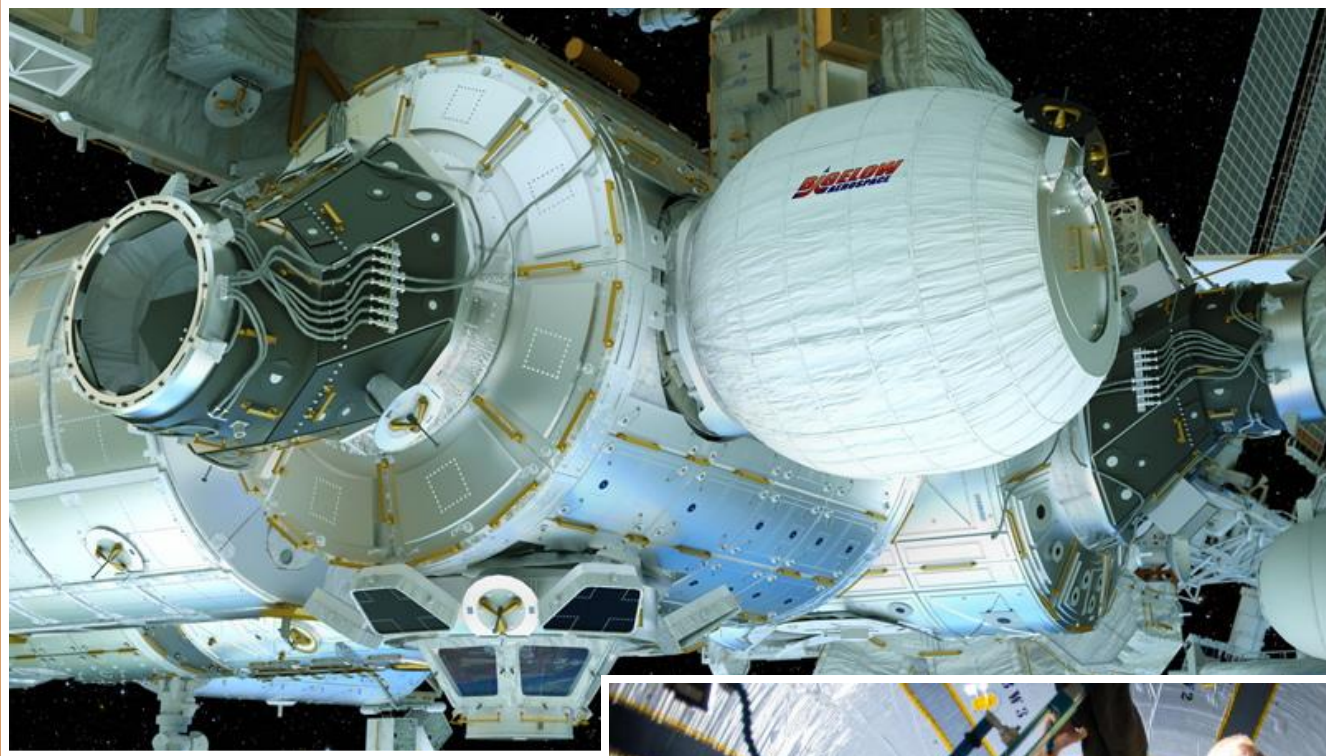


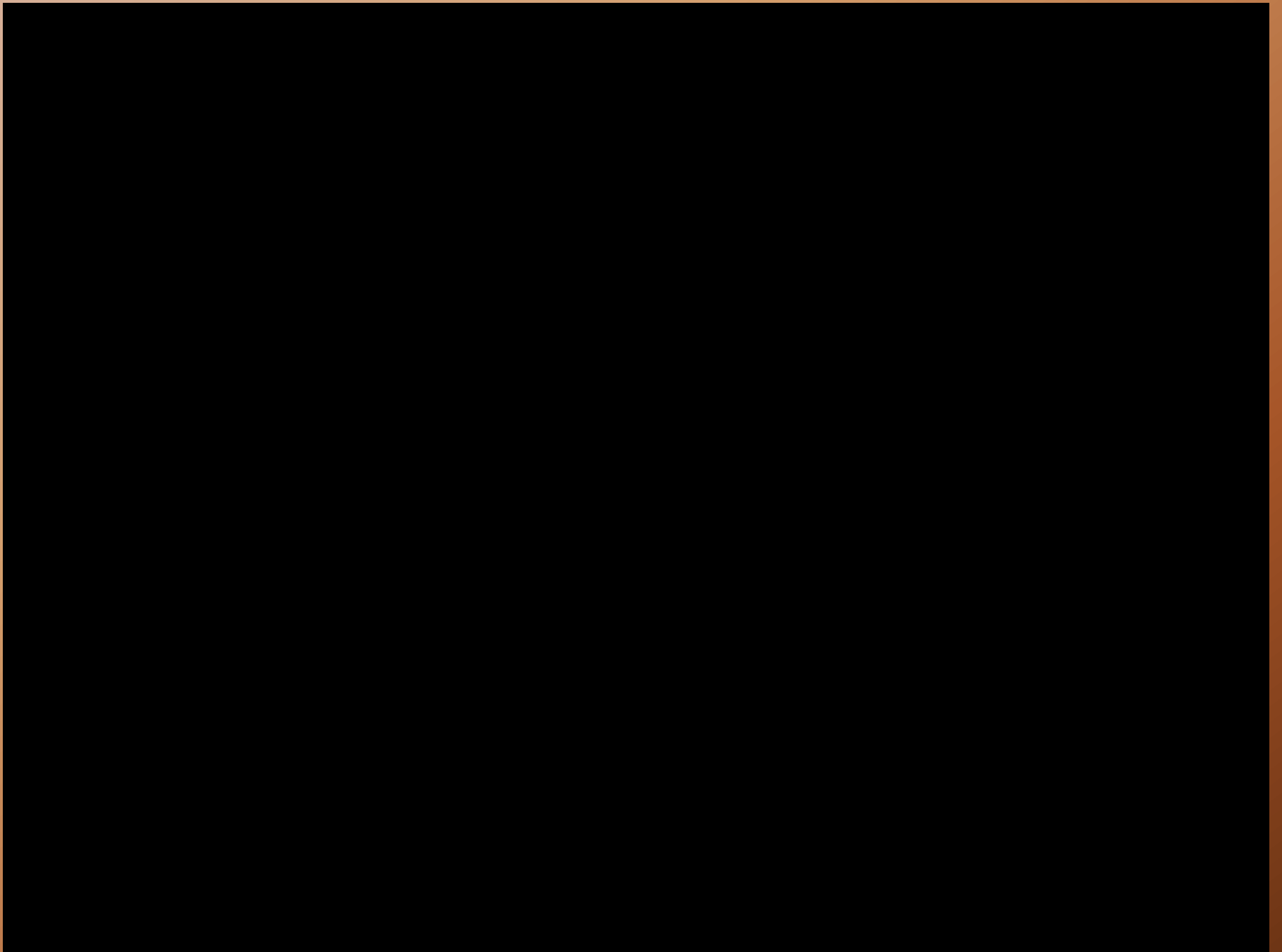








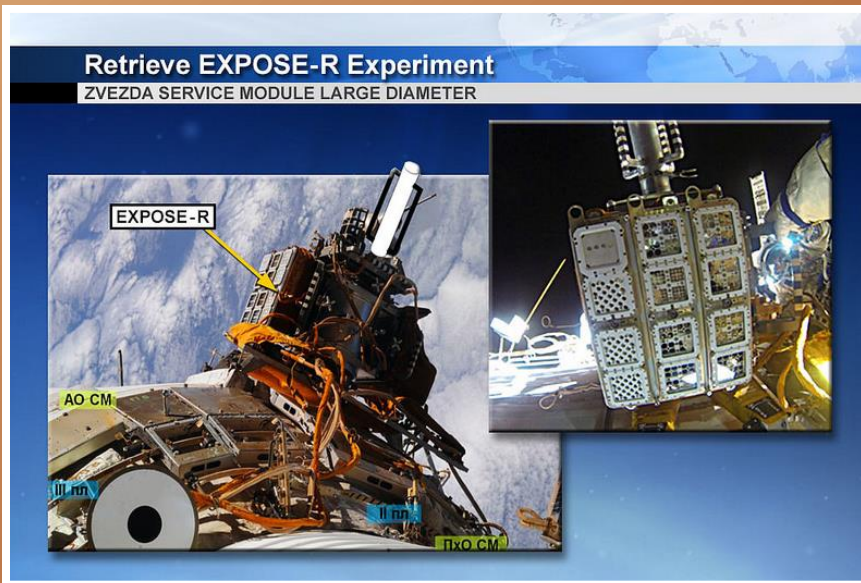




České experimenty na ISS



DOBIES – měření absorbované dávky záření v biologických vzorcích vystavených působení kosmického prostředí (od 2009)

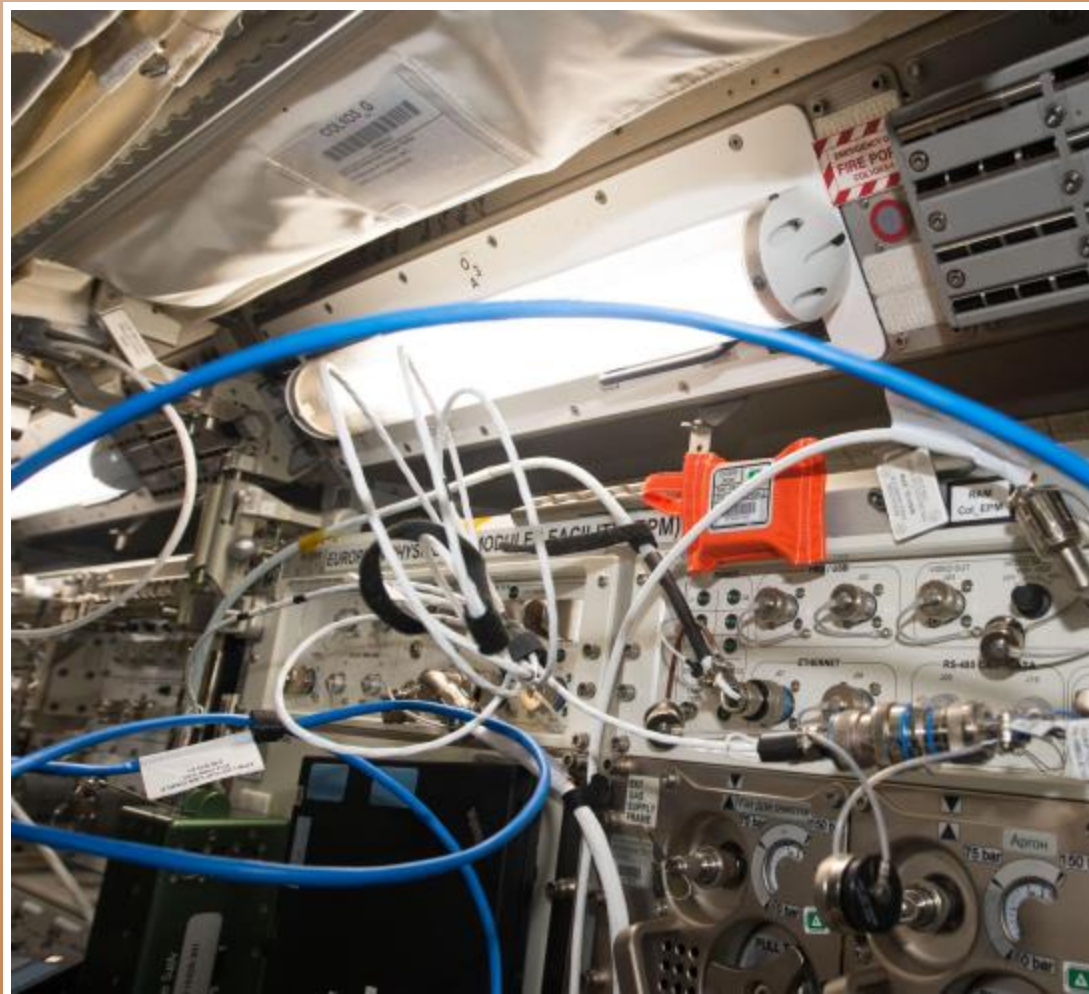


UJF AV ČR Řež

CETSOL / MICAST – zkoumání termofyzikálních vlastností hliníkových slitin vyrobených ve stavu mikrogravitace (2009-2012)

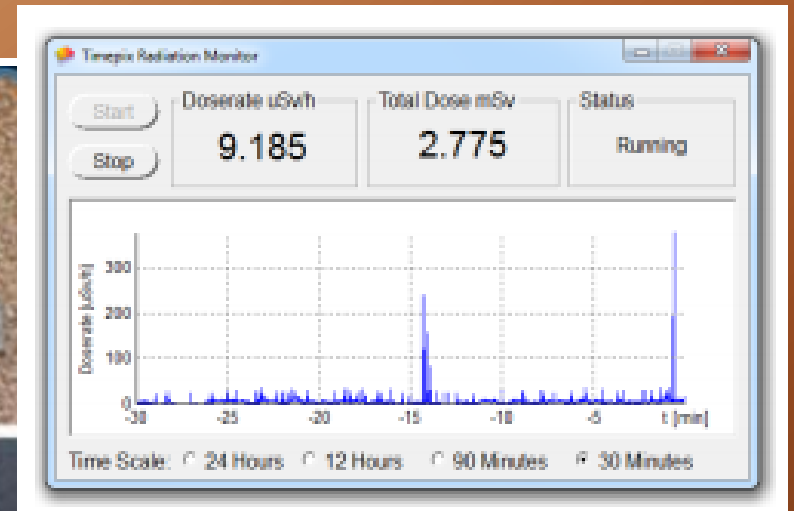
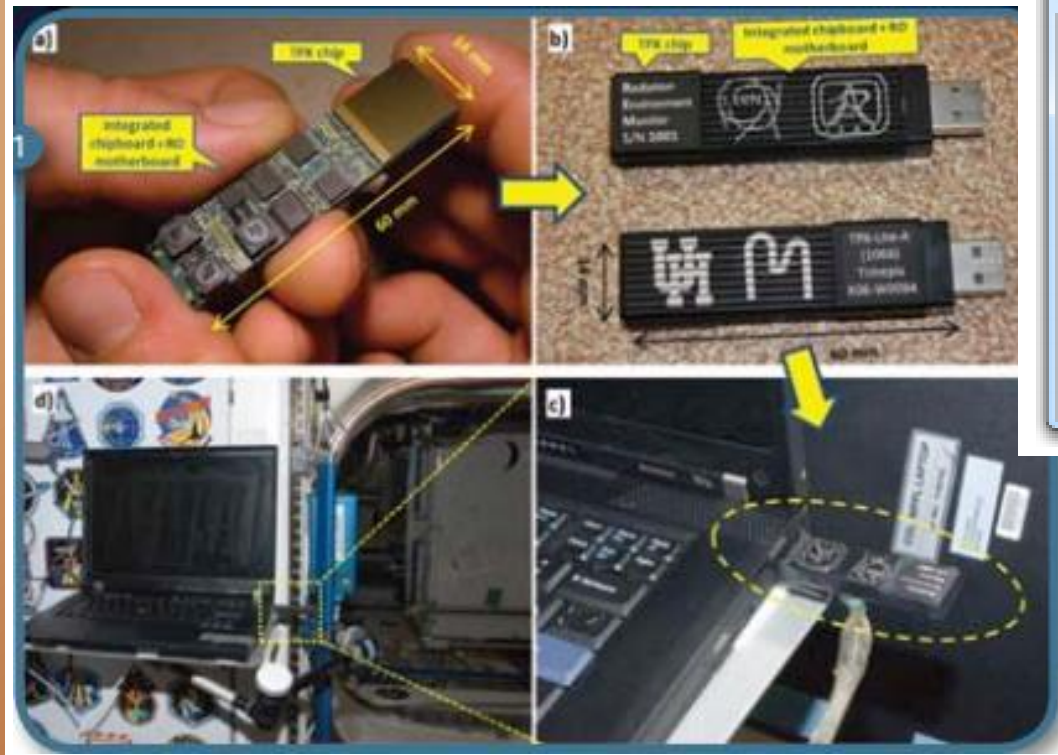


DOSIS-3D – mapování radiálního pozadí uvnitř modulů ISS pomocí pasívních i aktivních dozimetrů (2012-2017)

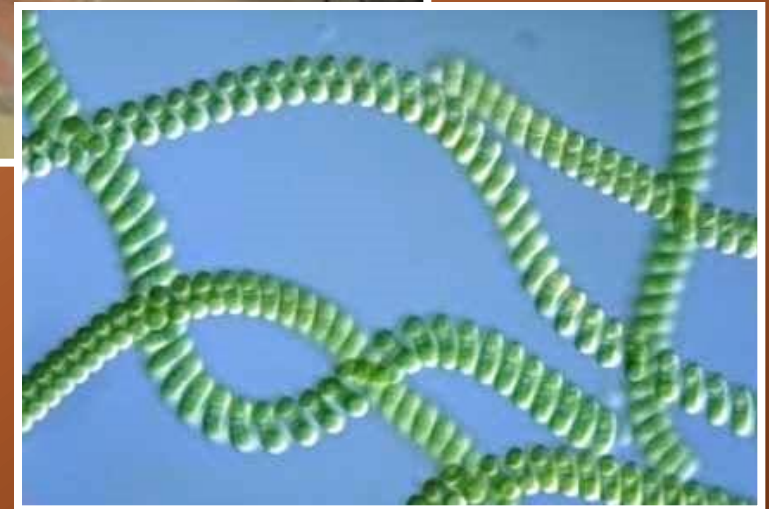


ÚJF AV ČR Řež, ČVUT

Aktivní online přístupné miniaturní dozimetry Timepix (od 2012)



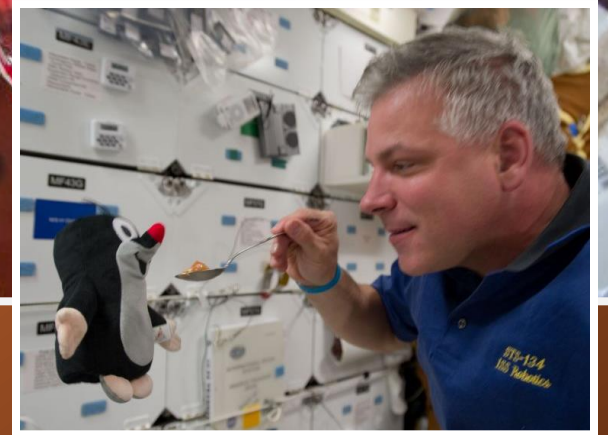
ARTEMISS – zkoumání sinic rodu *Arthrospira* v podmínkách kosmického prostředí a mikrogravitace (v přípravě)

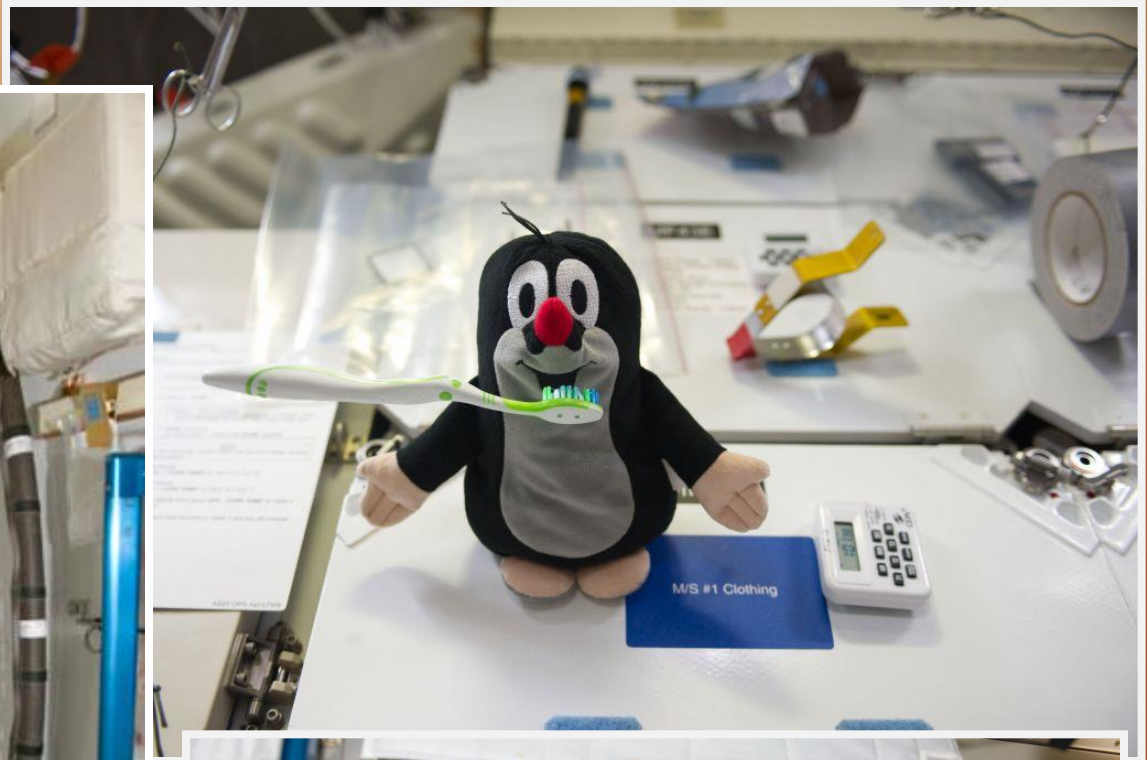


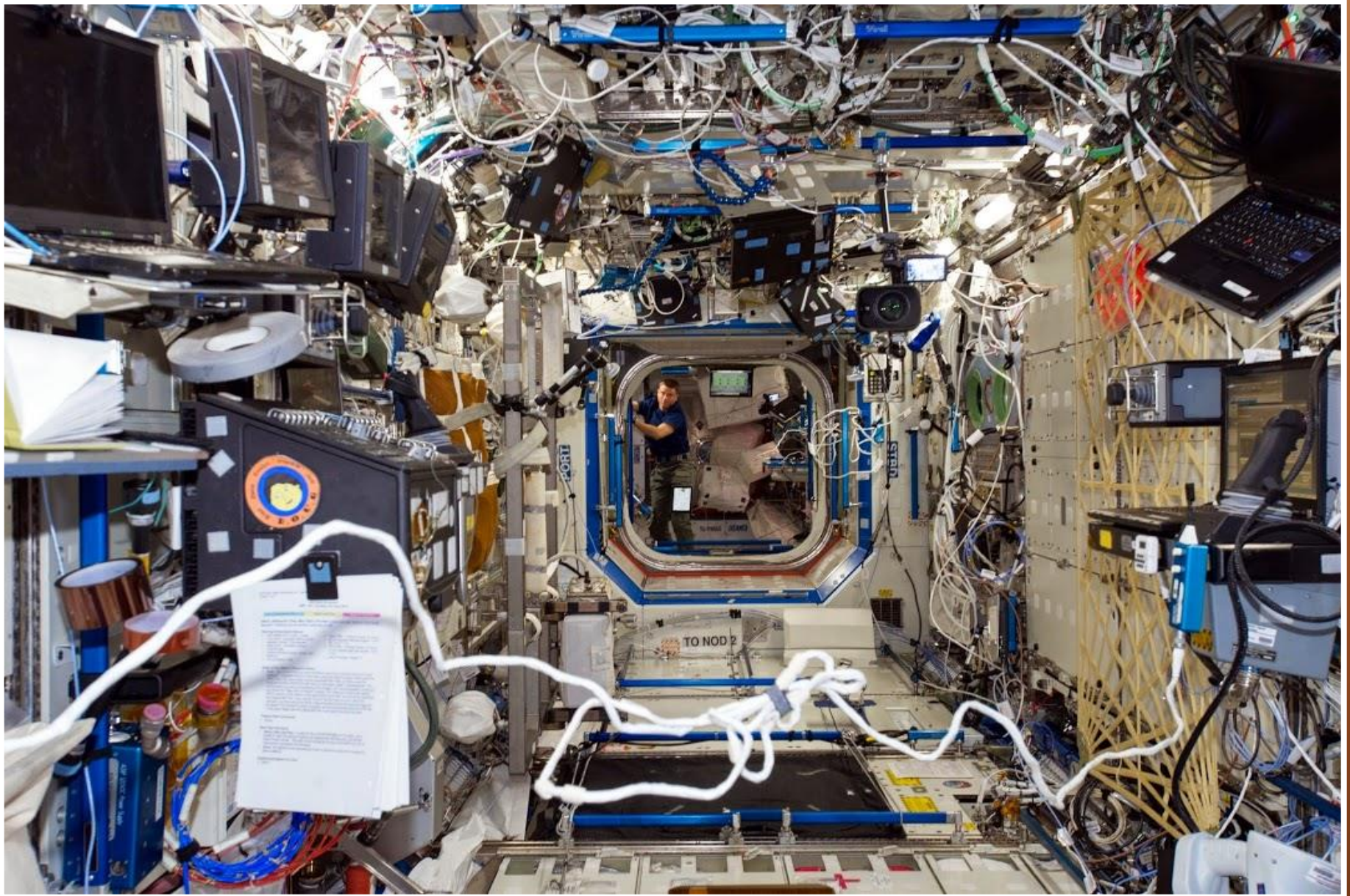
Botanický ústav AV ČR

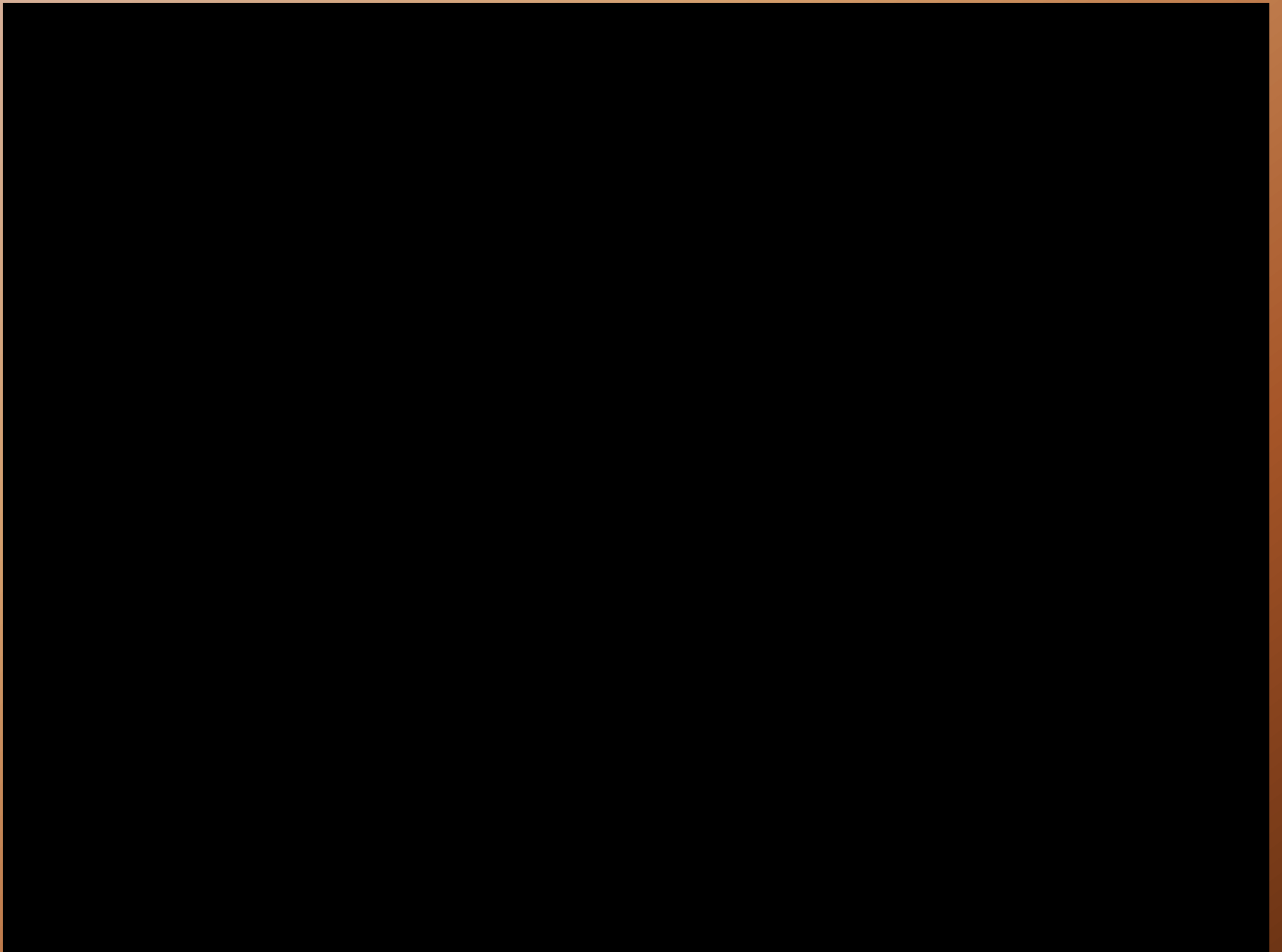
ELT – vysoce přesné laserové měření vzdálenosti pozemních stanic a ISS včetně přenosu časových značek (v přípravě)





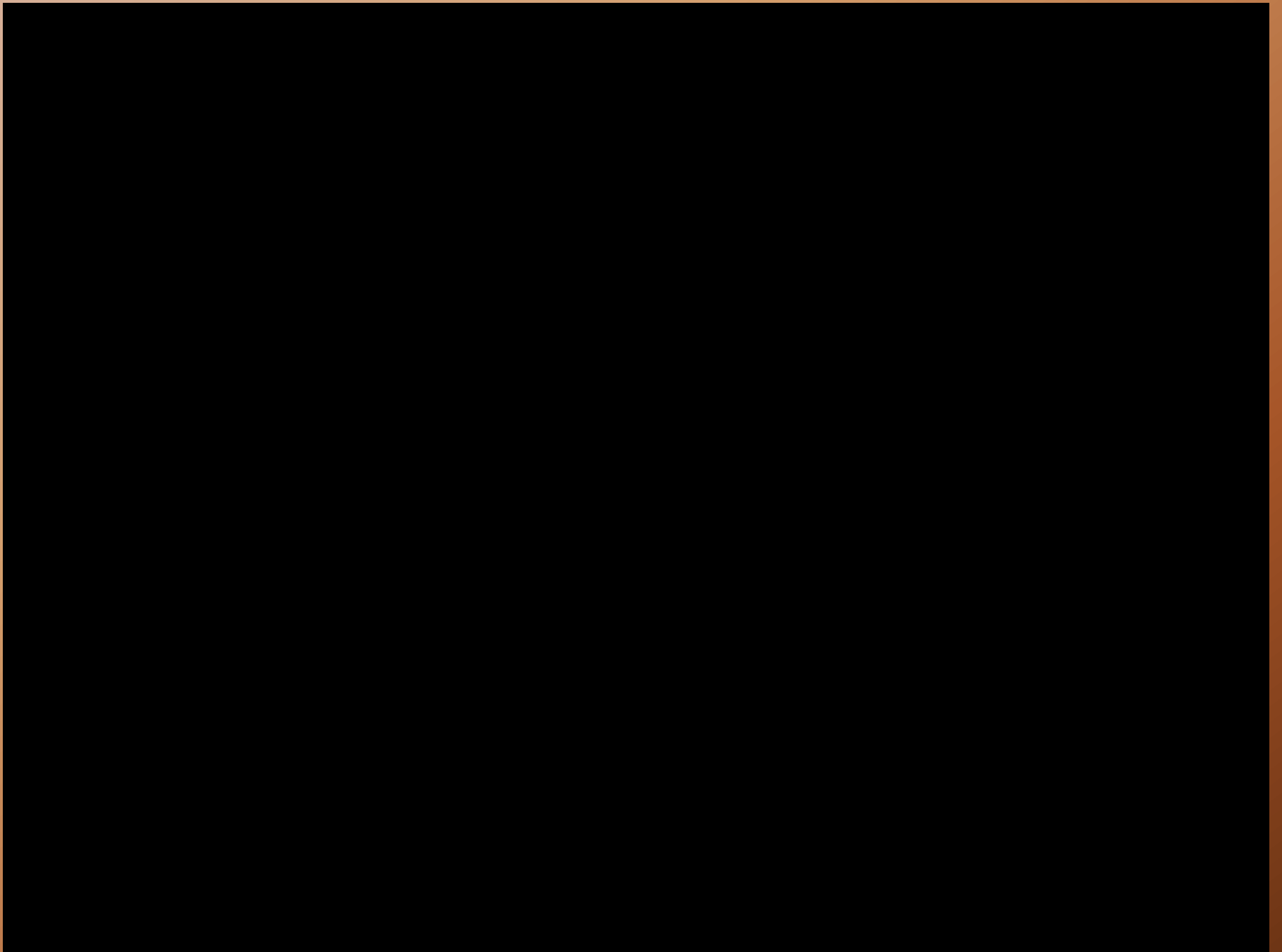










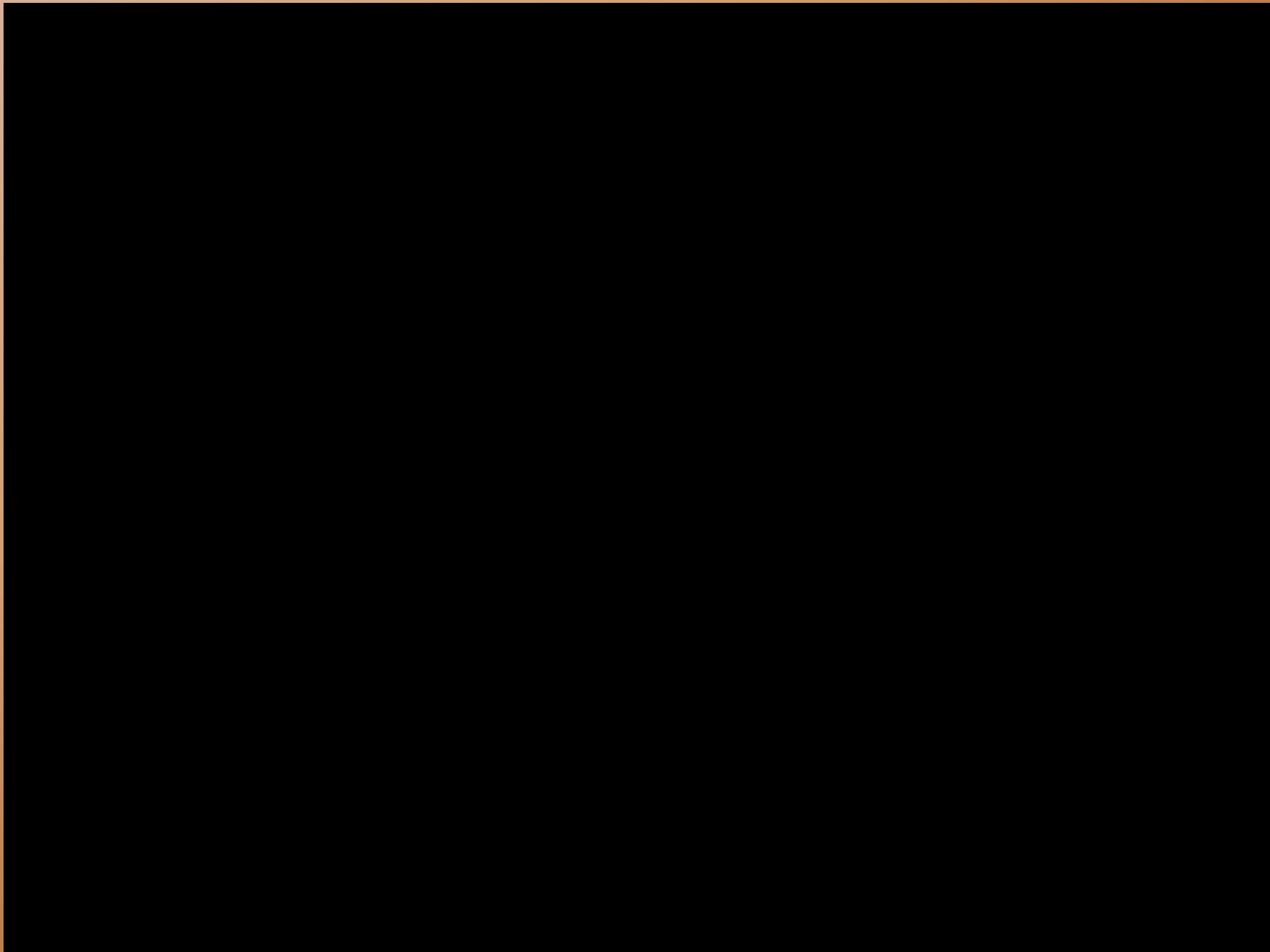


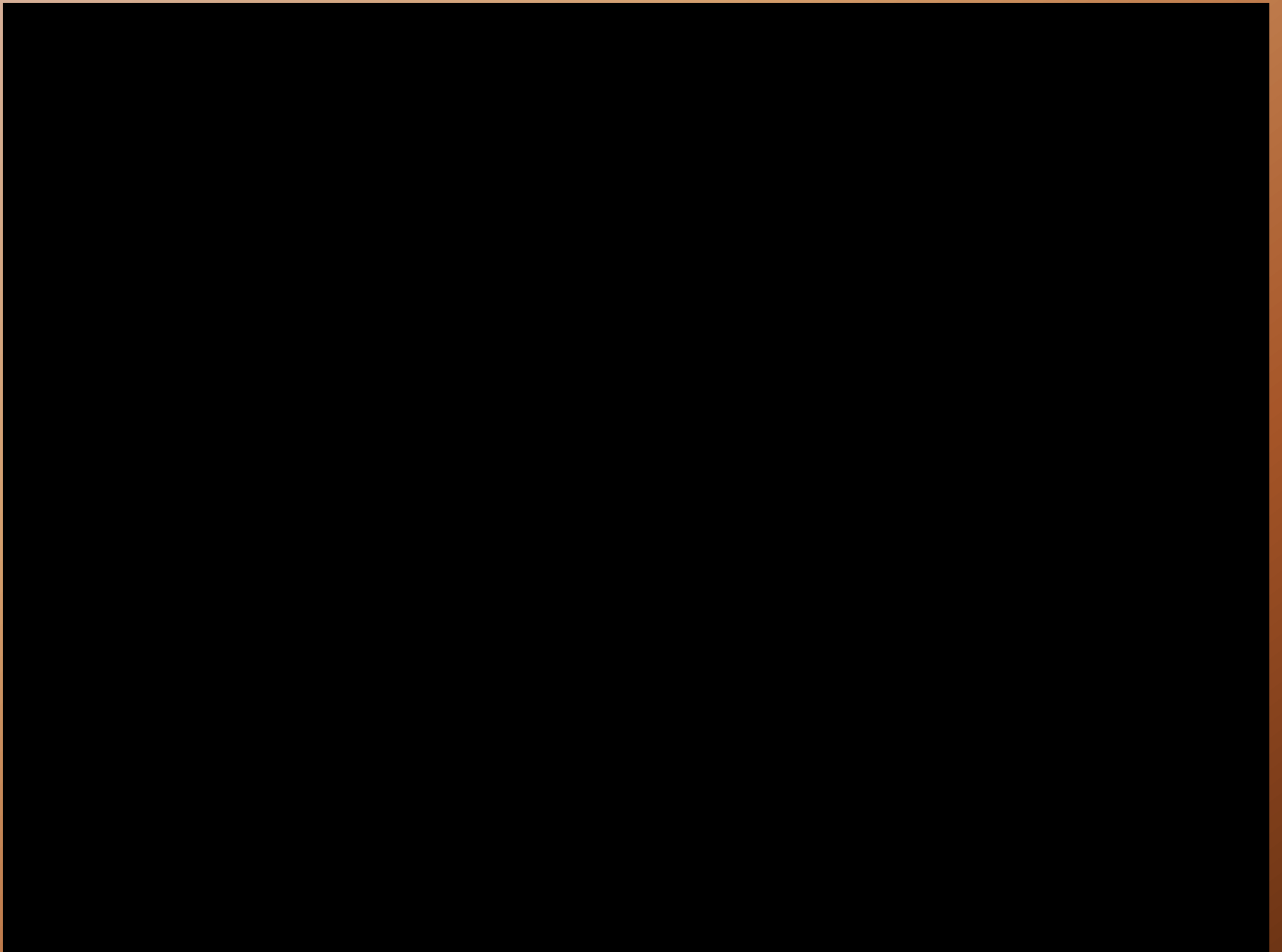


Sojuz TMA-14M

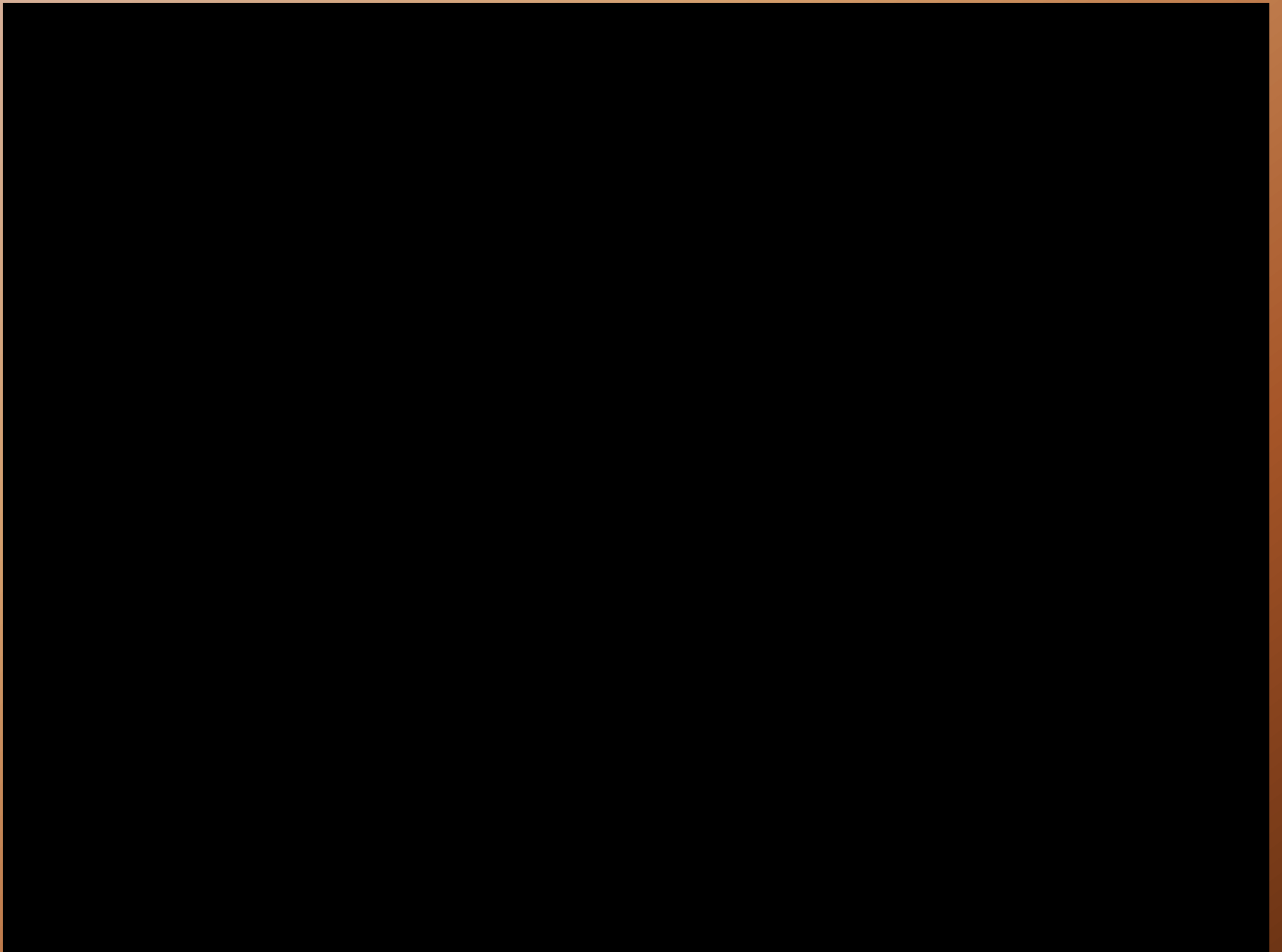
Sojuz TMA-16M

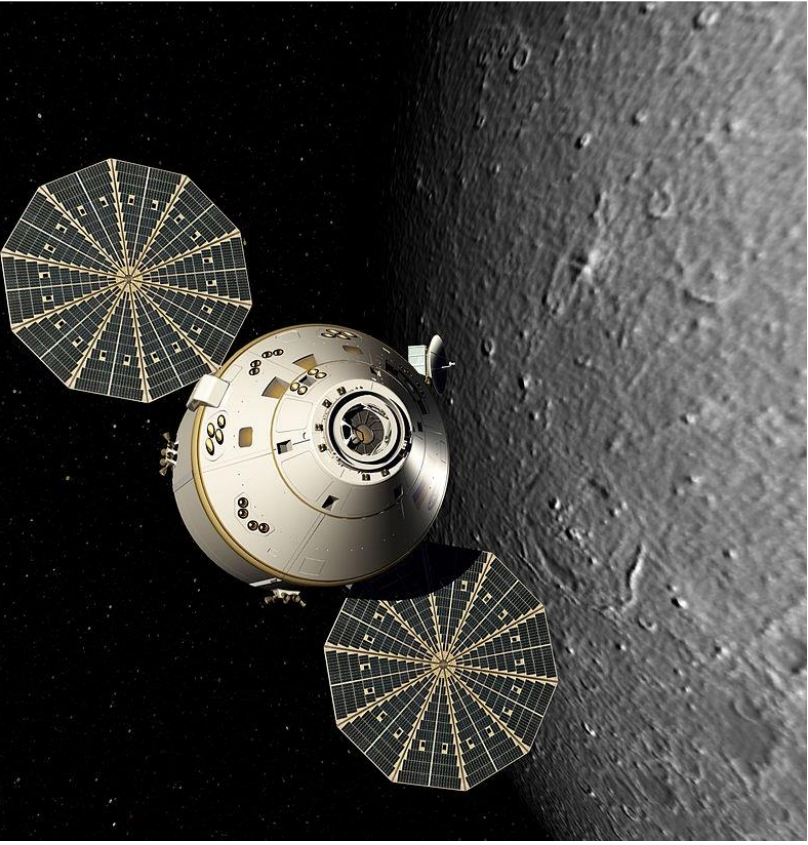


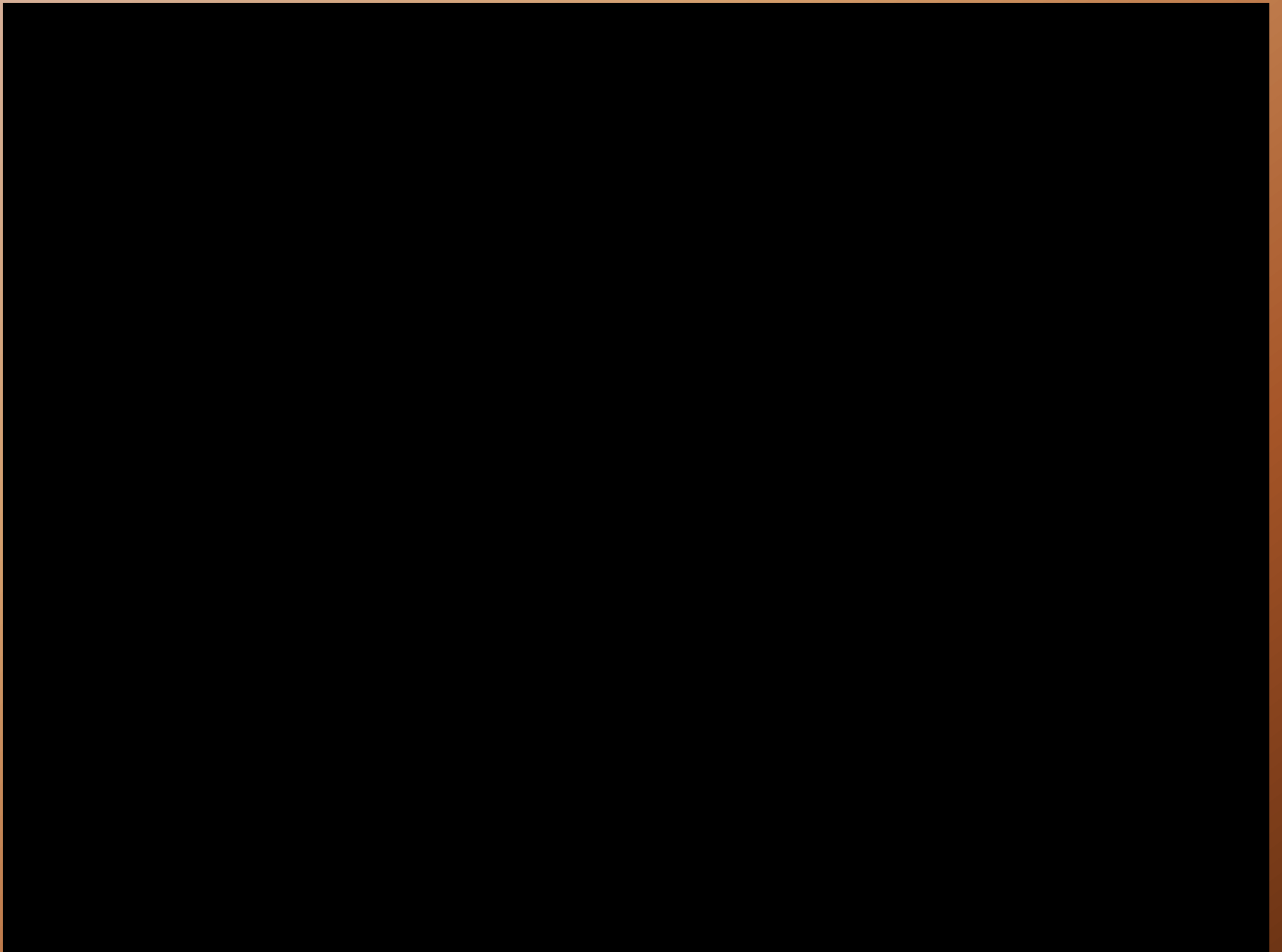


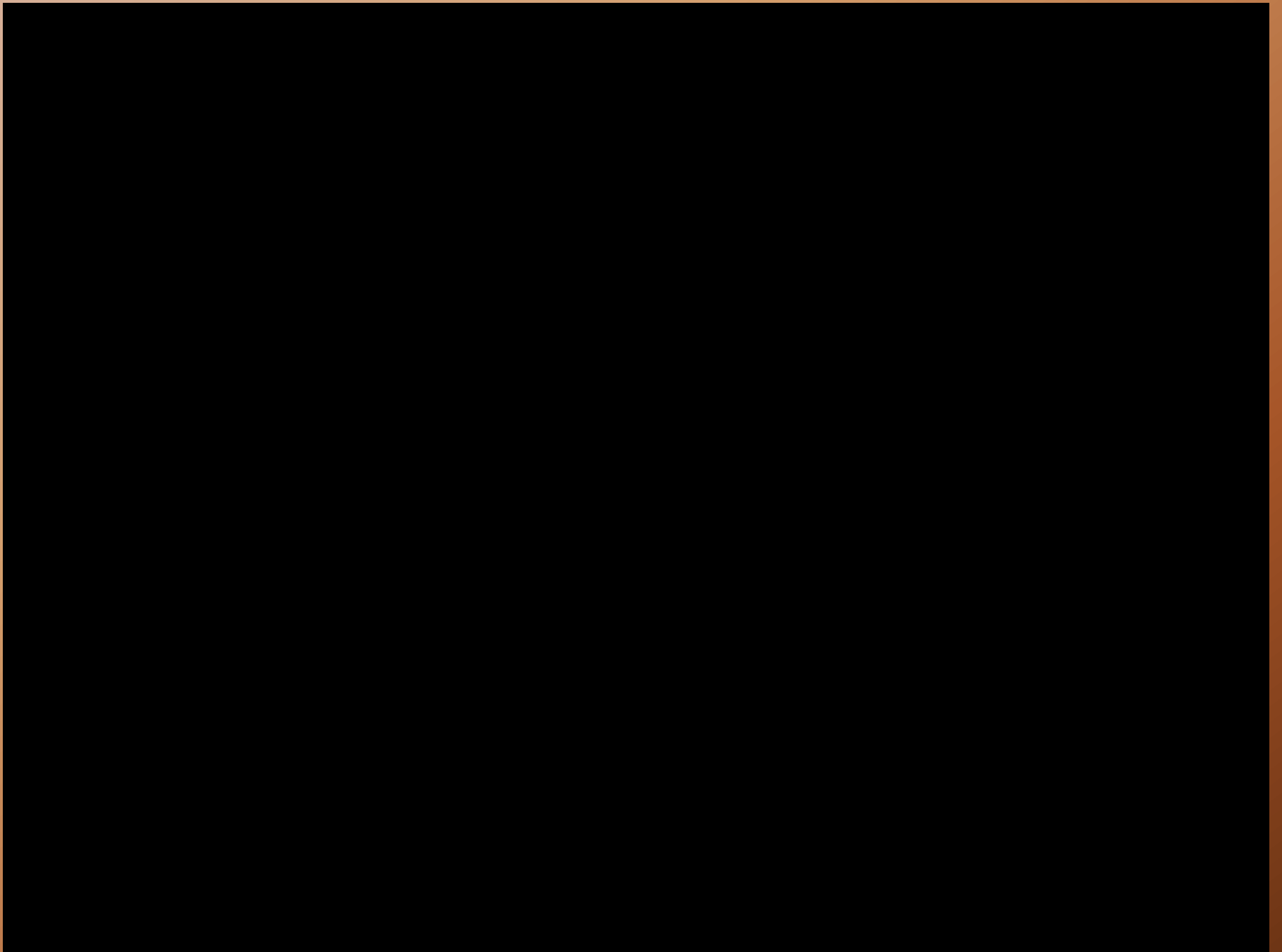








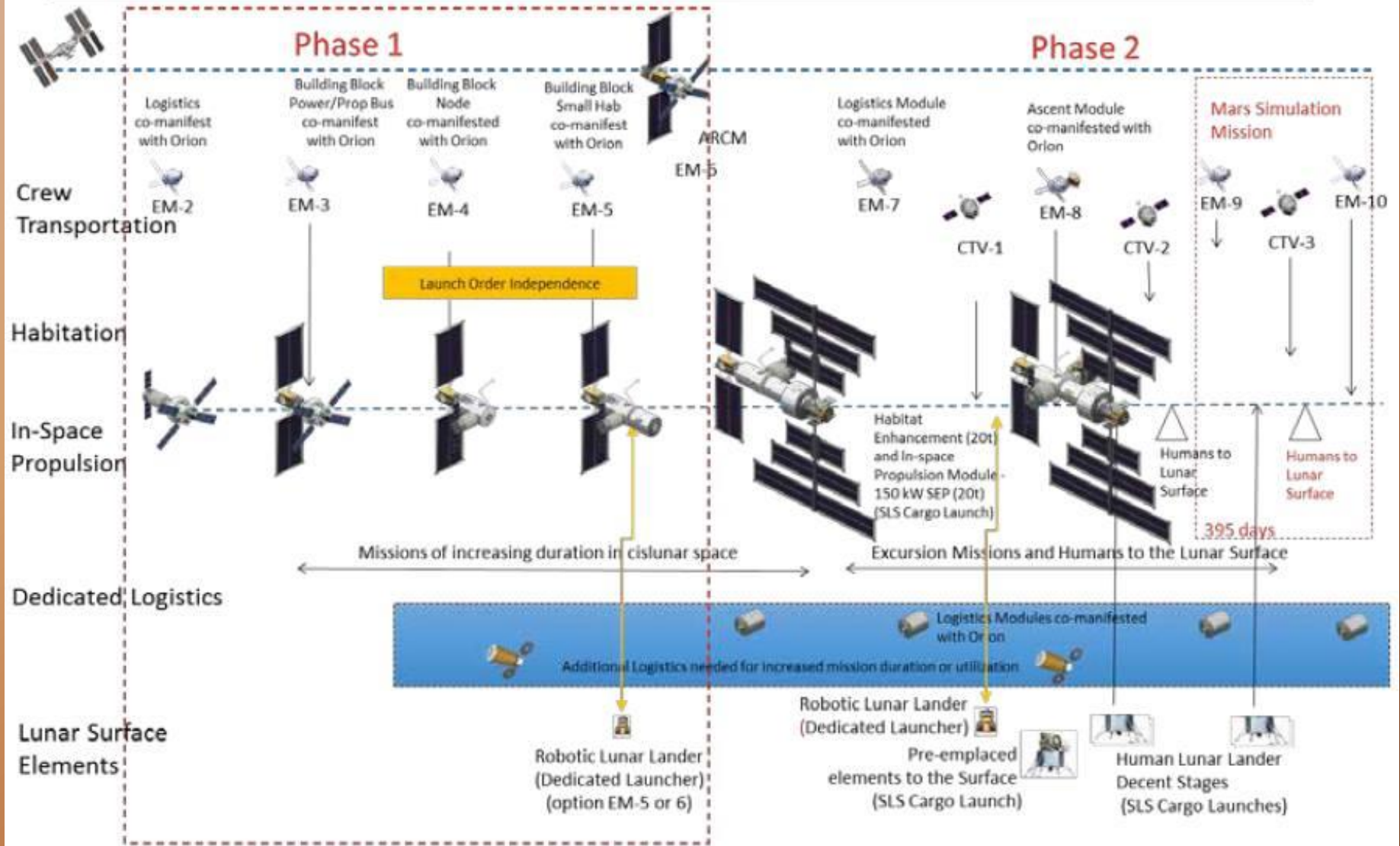


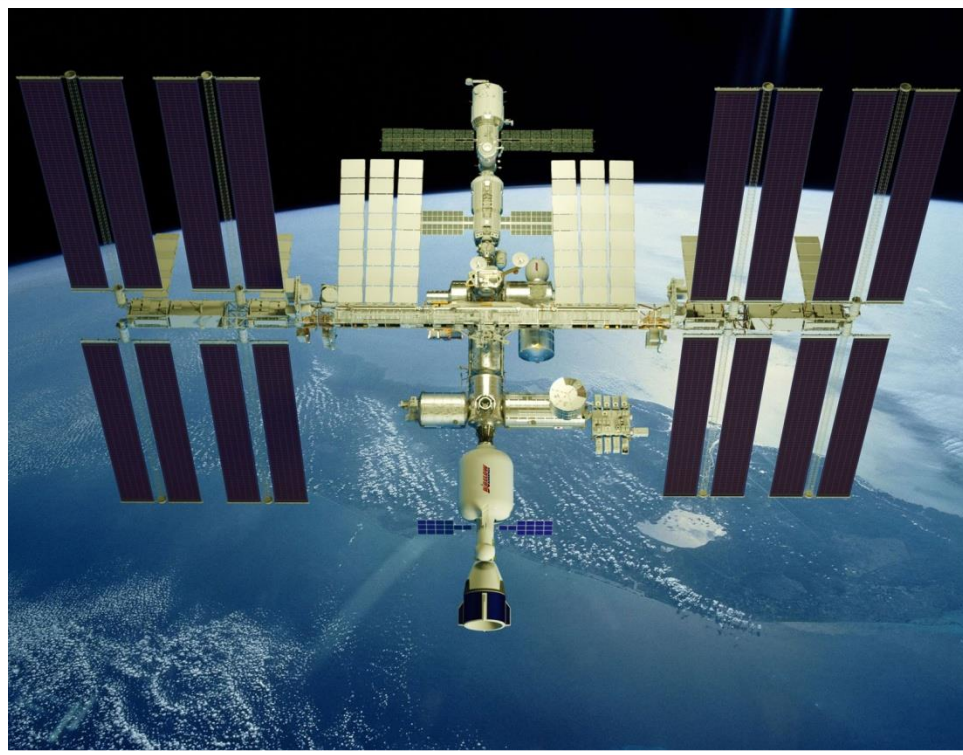


Nová vesmírná stanice (u Měsíce)

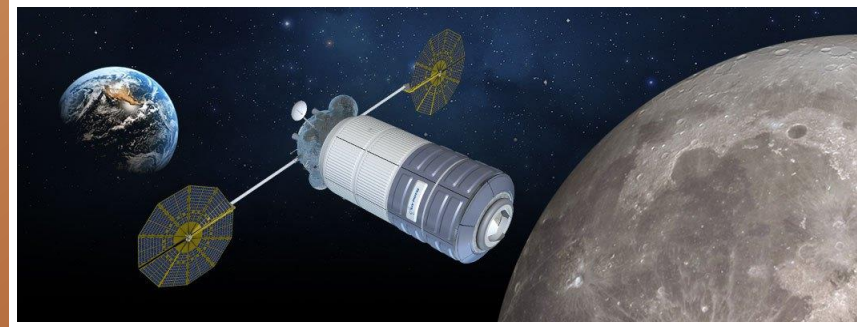
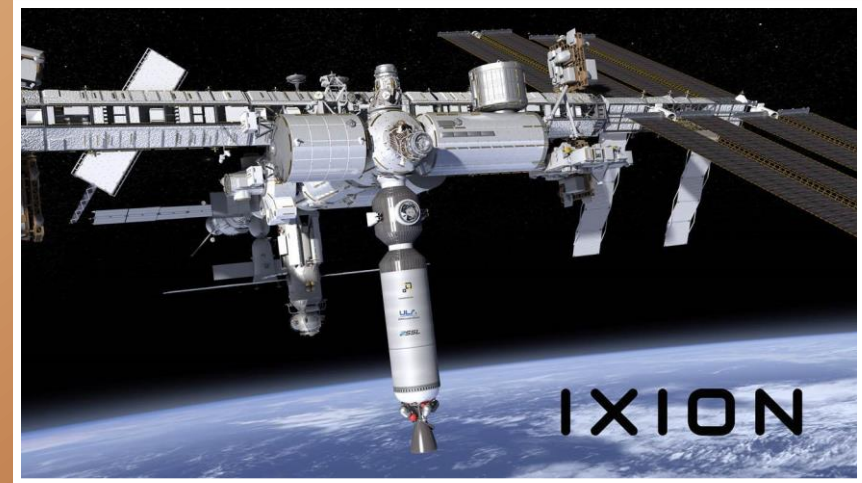
2020

2030





▲ Bigelow Aerospace: Stanice XBASE připojená k ISS



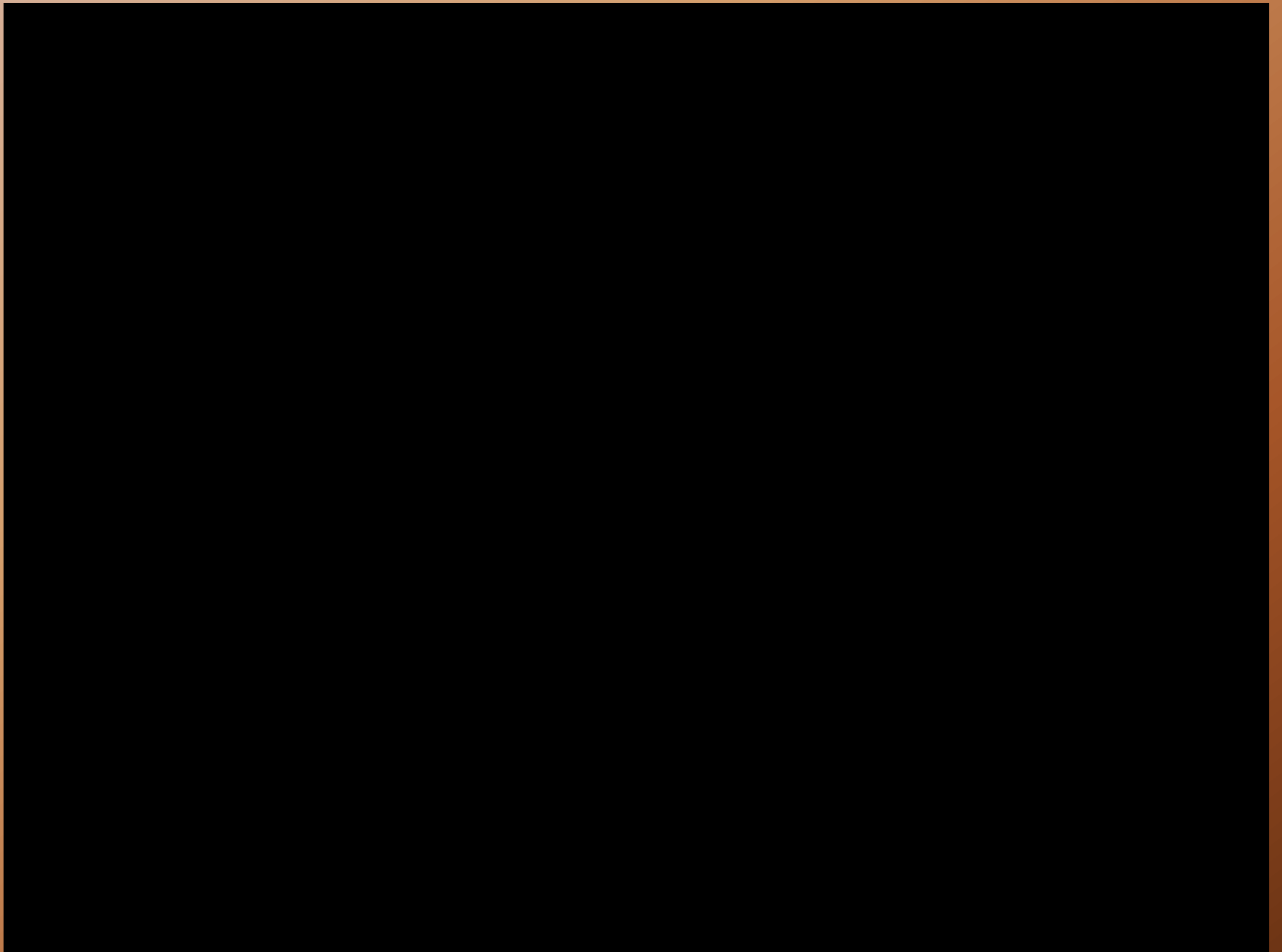
▲▲ NanoRacks: upravené horní stupně raket

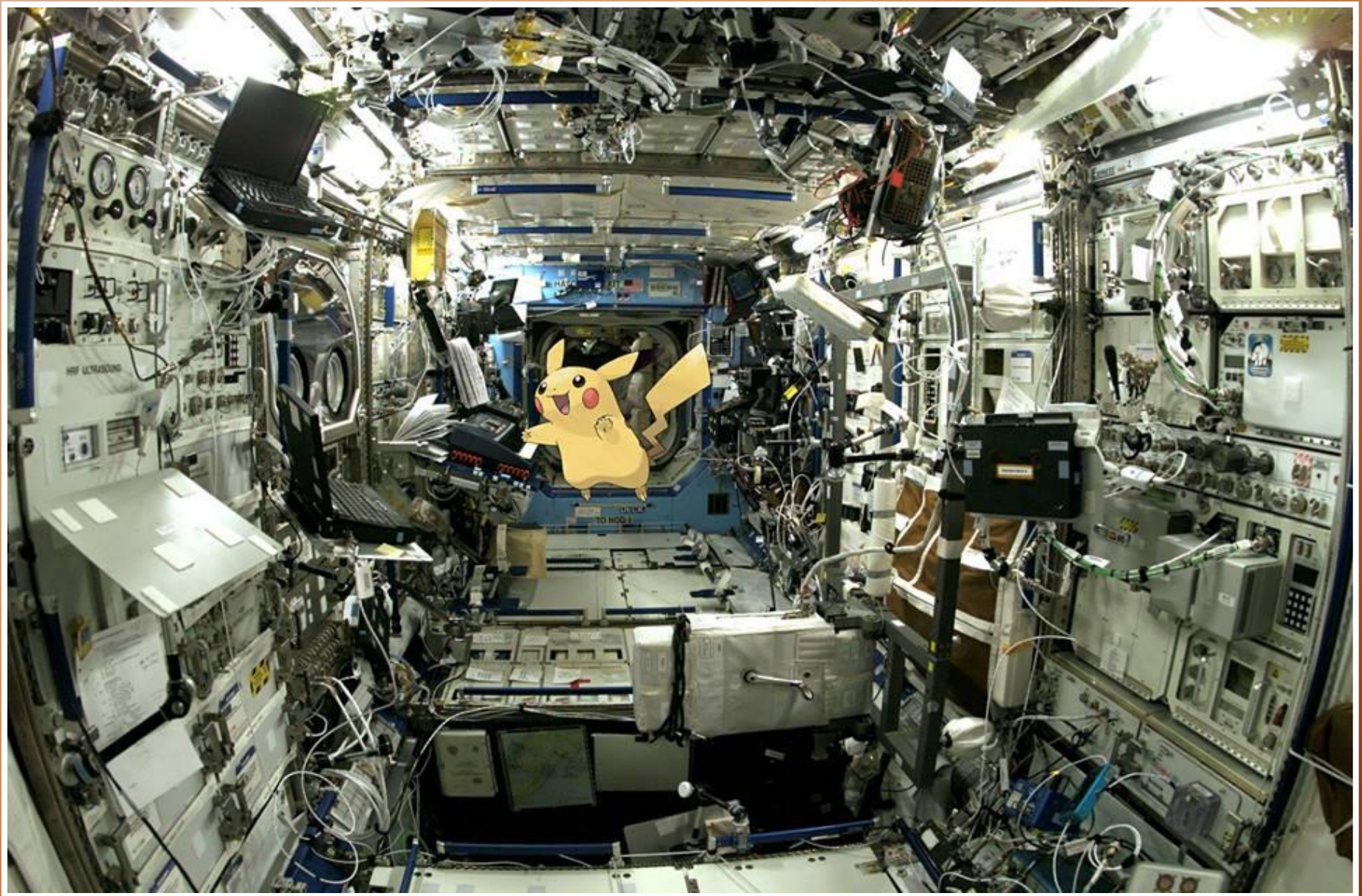
▲ Orbital ATK: obytný modul z lodi Cygnus

◀◀ Lockheed Martin: architektura víceúčelových logistických modulů

◀ Sierra Nevada Corporation









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Milan HALOUSEK
Česká kosmická kancelář

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**„Inspirovat, motivovat a podporovat
mladé lidi při zvyšování jejich
gramotnosti v moderní vědě
a nových technologiích“**