

WELCOME to **Galaxy Evolution with the ESA EUCLID** **Mission and ESO Telescopes**

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Welcome to ESAC

ESA's European Space Astronomy Centre



Since 1978: VILSPA
Since 2004: ESAC

~400 employees

Main Activity:
Science Programme, incl.
Science Operations
Data Science & Archives

Also:
Earth Observations
Space Situational Awareness

ESTABLISHMENTS AND FACILITIES

PROGRAMMES

Space Transportation

Telecommunications

ESA ECSAT

Applying space to daily life.

EUROPE'S SPACEPORT

Guaranteeing European access to space.

Space Science

ESA ESAC

ESA's window on the Universe.

ESA ESEC

Innovating in space security and education.

ESA HQ

Guiding Europe's activities in space.

ESA ESTEC

ESA's technical and research heart.

Satellite Navigation

Technology

Human and Robotic Exploration

ESA EAC

Europe's hub of astronaut activity.

ESA ESOC

Where space missions come alive.

Operations

Earth Observations

ESA ESRIN

Keeping watch over our planet.

Space Science

Directorate for Science:

Budget: ~580 M€ yearly

defined at ESA's Ministerial Conference every three years

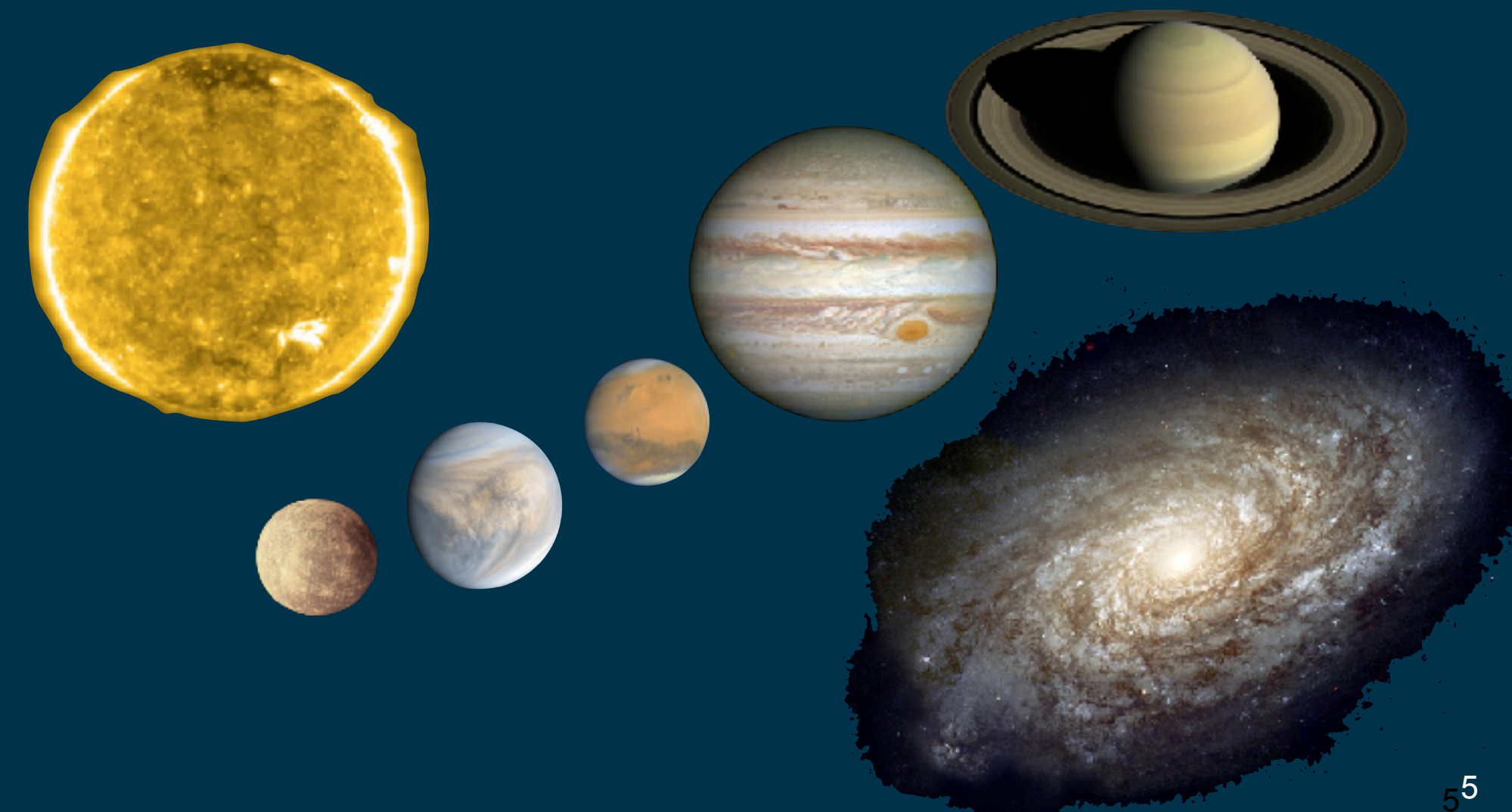
Staff: ~250 staff + ~250 contractors at ESTEC, ESAC, STScI and GSFC

A programme covering space missions in

Heliophysics

Planetary Science

Astronomy and Fundamental Physics



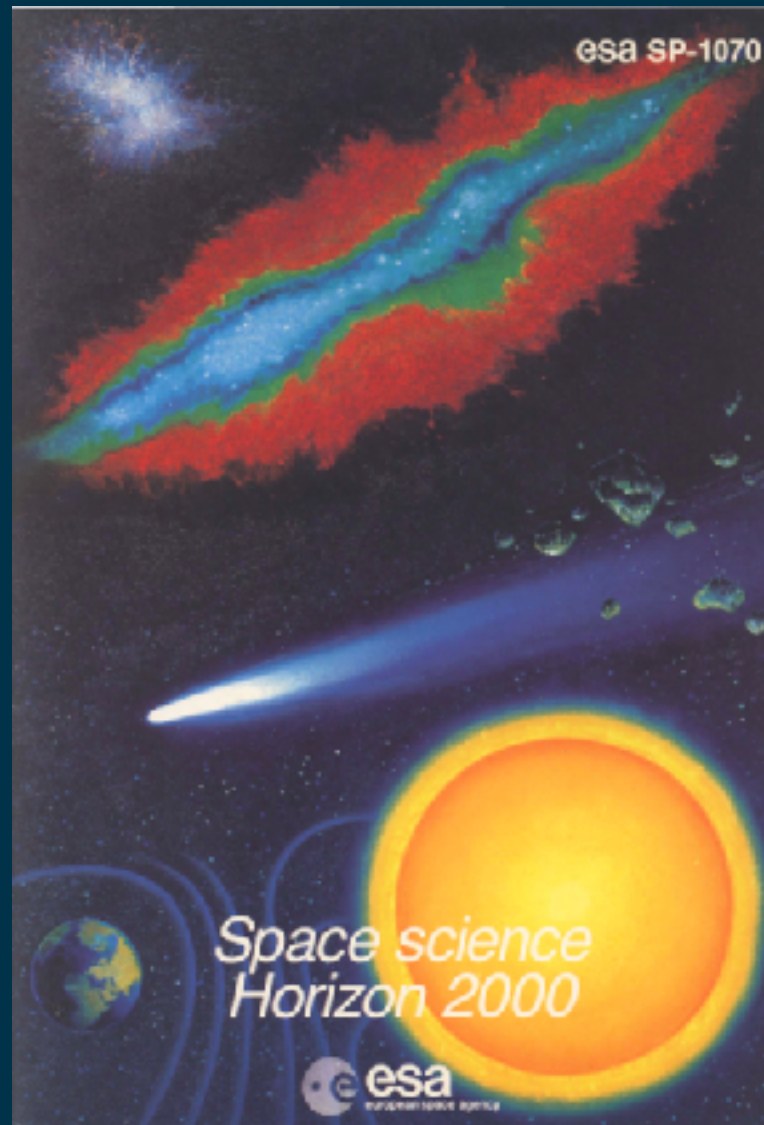
ESA Directorate of Science's Vision:

Empowering Europe to lead in Space Science

Scientific Programme Strategic Planning



Cornerstone missions: **SOHO**, Cluster/Cluster II, **XMM-Newton**, Rosetta, Herschel
Medium-sized missions: Huygens (Cassini), **INTEGRAL**, Planck



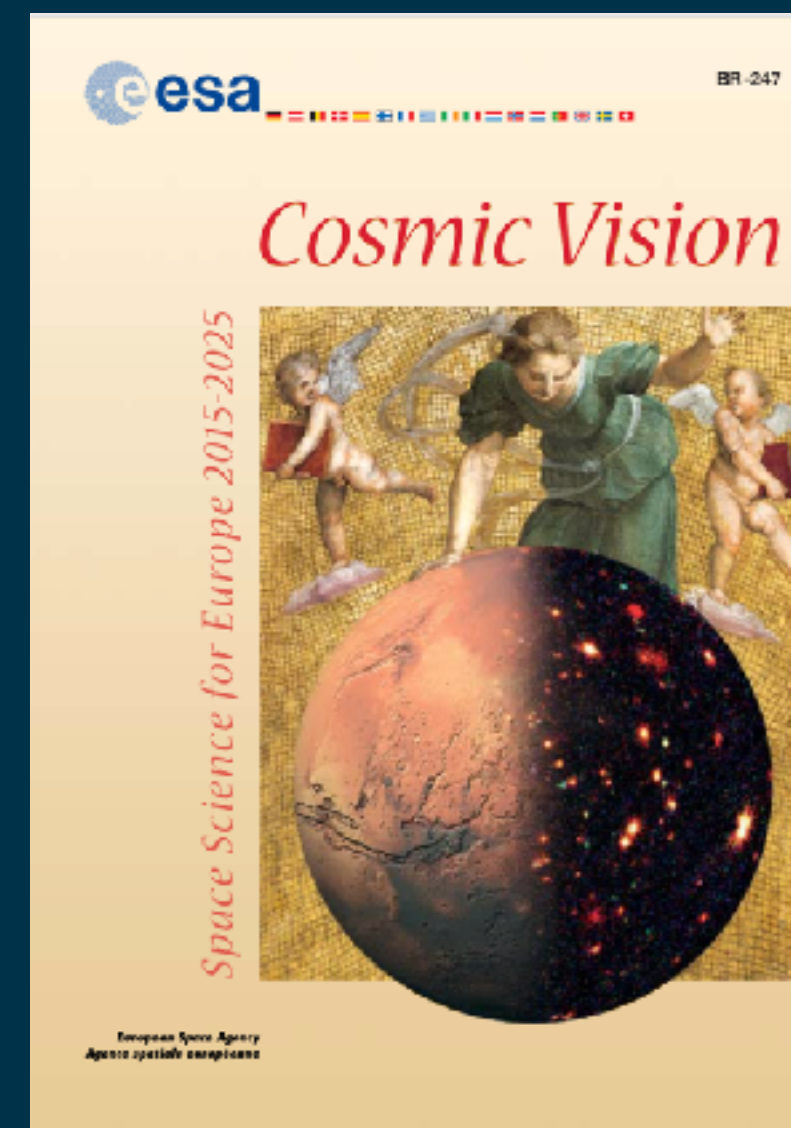
1984



1995

Gaia, LISA Pathfinder, **BepiColombo**

Flexible missions: **Mars Express**, Venus Express



2005

L-class missions: JUICE, Athena, LISA
M-class missions: **Solar Orbiter**, Euclid, PLATO, ARIEL, Envision
S/F-class missions: **CHEOPS**, Comet Interceptor



2021

+ partner missions: **Hubble**, **Webb**, SMILE
+ missions of opportunity: Proba-2, **Hinode**, **ExoMars**, **Iris**, Einstein Probe, XRISM, MMX, Proba-3, Roman, Solar-C



The current missions

COSMIC OBSERVERS



IN DEVELOPMENT



ariel
(2029)

roman
(2026)

euclid
(2023)



plato
(2026)



xrism
(2022)



einstein probe
(2022)

athena
(2034)



lisa
(2037)

We prepare the science operations

ACTIVE



webb
(2021)



hubble
(1990-)



gaia
(2013-)



cheops
(2019-)



xmm-newton
(1999-)



integral
(2002-)

We are in charge of the mission

microwaves

sub-millimetre

infrared

optical

ultraviolet

x-rays

gamma rays

gravitational waves

We maximise the scientific return

We curate the mission data

LEGACY



planck
(2009-2013)



herschel
(2009-2013)



iso
(1995-1998)



akari
(2006-2011)



hipparcos
(1989-1993)



corot
(2006-2014)



iue
(1978-1996)



exosat
(1983-1986)



hitomi
(2016)



suzaku
(2005-2015)



cos-b
(1975-1982)



lisa pathfinder
(2015-2017)



microscope
(2016-2018)

SOLAR SYSTEM EXPLORERS



We prepare the science operations



IN DEVELOPMENT

We maximise the scientific return

ACTIVE

We are in charge of the mission



We curate the mission data

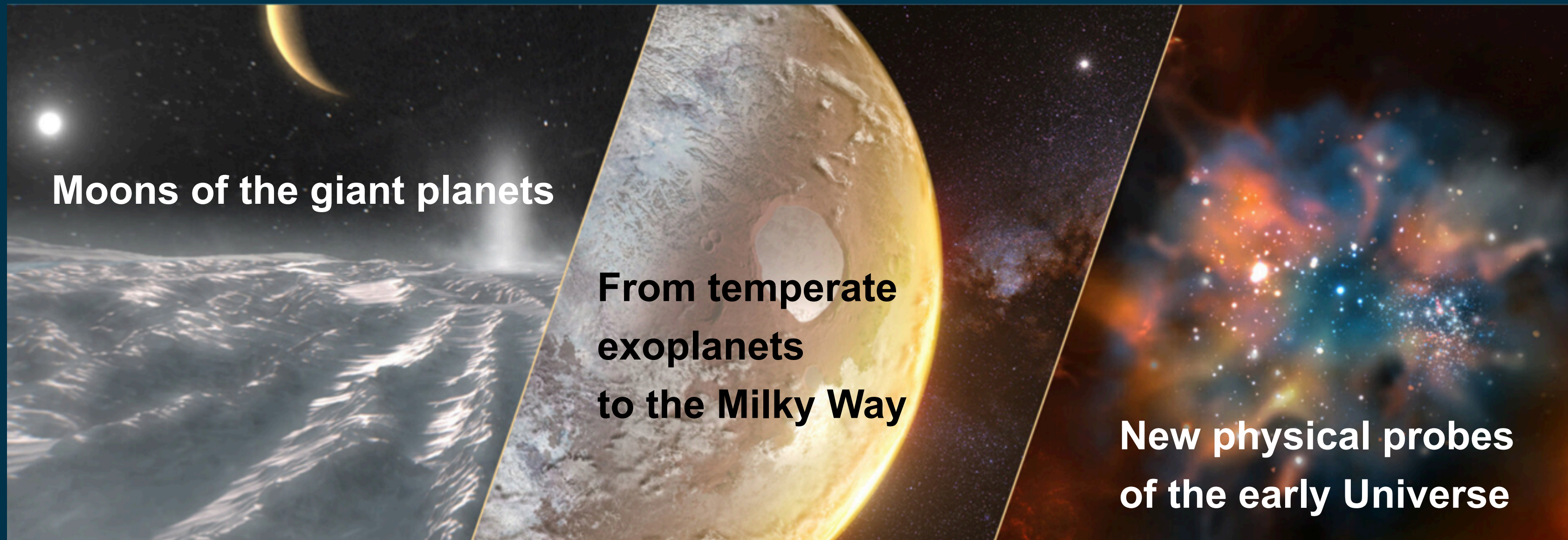


LEGACY

On-going selection process for

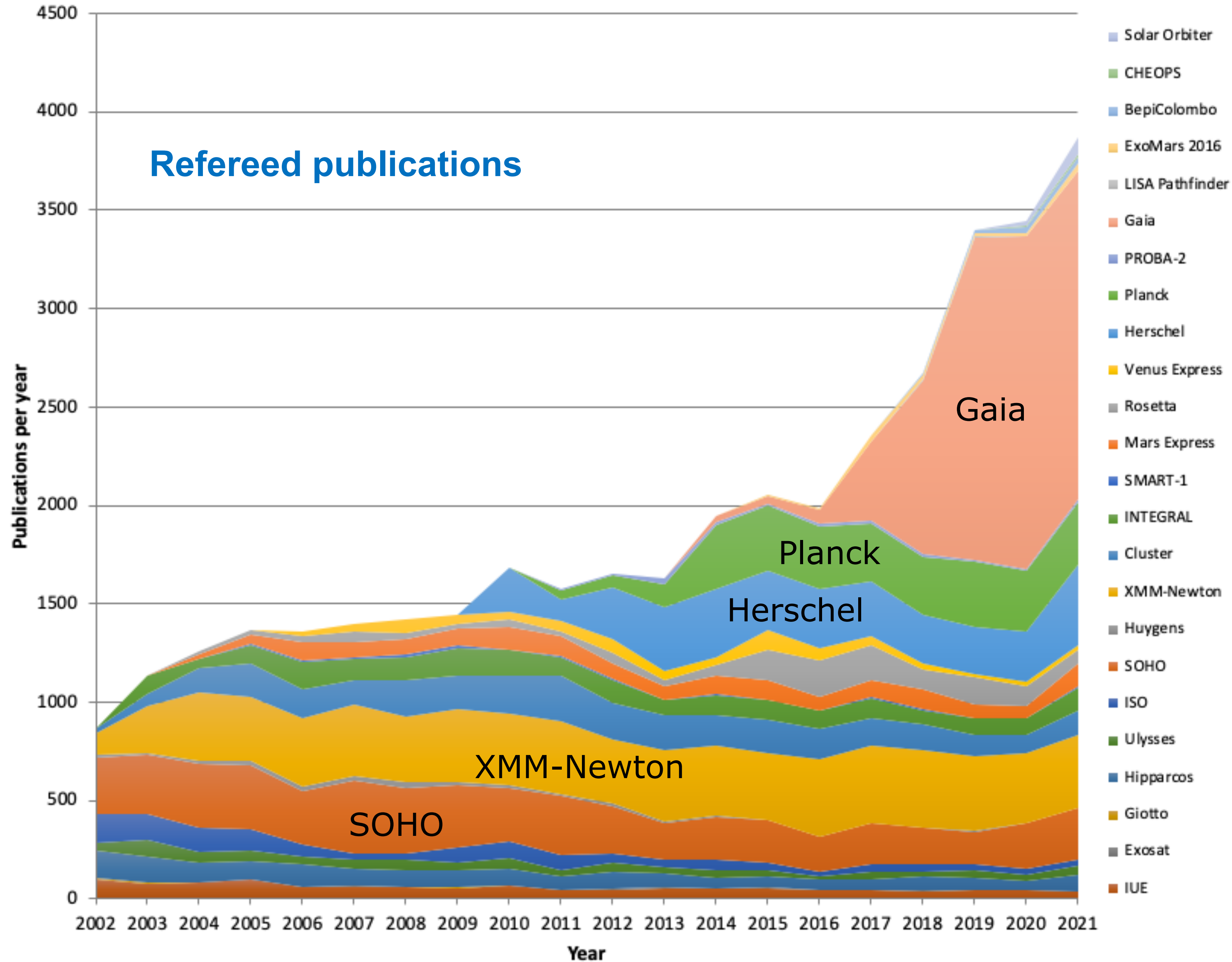
- a **Fast Mission** (launch 2030-2031)
- a **Medium-Class Mission** (launch around 2037)

On-going identification of next **Large Mission of Voyage 2050**



Productivity

Refereed publications



Euclid?

To access the call for proposals of missions: **cosmos.esa.int**

To access the mission's data: **sky.esa.int**

Enjoy the Conference !

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