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Media Relations

Media invitation, 25 November 2019

Media conference “Launch of the CHEOPS mission”

For the time being, the Swiss space telescope CHEOPS is scheduled to begin its journey into space in mid-December on board a Soyuz rocket from the European Space Agency (ESA) in Kourou, French Guiana. CHEOPS is a joint mission of ESA and Switzerland, led by the University of Bern, in collaboration with the University of Geneva.

Media representatives are cordially invited to inform themselves about the background and challenges of the mission:

Media conference “Launch of the CHEOPS mission”

Date: Thursday, 5 December, 2019, 10:00 a.m. CET

Location: Building of the Exact Sciences of the University of Bern, Faculty Room, Sidlerstrasse 5, 3012 Bern

The following speakers will take part:

Christian Leumann	Rector of the University of Bern
Yves Flückiger	Rector of the University of Geneva
Renato Krpoun	Head of Swiss Space Office of the State Secretariat for Education, Research and Innovation SERI
Willy Benz	Principal Investigator of the CHEOPS mission and Director of the National Centre of Competence in Research PlanetS, University of Bern
David Ehrenreich	CHEOPS Consortium Mission Scientist, University of Geneva
Kate Isaak	CHEOPS Project Scientist, European Space Agency ESA

Please register by Tuesday, 3 December at medien@unibe.ch / Phone +41 31 631 41 42.
Interview requests can be sent to the same address.

CHEOPS – in search of potential habitable planets

The CHEOPS mission is the first of the ESA's newly created "S-class missions" (small class missions with an Agency budget under 50 million) and is dedicated to characterizing exoplanets' transits. "CHEOPS" (CHaracterising ExOPlanet Satellite) will take highly accurate measurements of stars and monitor small changes in their brightness that are caused by a planet transiting in front of the star.

CHEOPS was developed as part of a partnership between the European Space Agency (ESA) and Switzerland. Under the leadership of the University of Bern and ESA, a consortium of more than a hundred scientists and engineers from eleven European states was involved in constructing the satellite over five years. A Soyuz rocket will take the research satellite together with a larger Italian radar satellite in Earth orbit at 700 km altitude.

The Swiss Confederation participates in the CHEOPS telescope within the PRODEX programme (PROgramme de Développement d'EXpériences scientifiques) of the European Space Agency ESA. Through this programme, national contributions for science missions can be developed and built by project teams from research and industry. This transfer of knowledge and technology between science and industry ultimately also gives Switzerland a structural competitive advantage as a business location – and enables technologies, processes and products to flow into other markets and thus generate added value for our economy.

More information: www.cheops.unibe.ch

Bernese space exploration: With the world's elite since the first moon landing

When the second man, "Buzz" Aldrin, stepped out of the lunar module on July 21, 1969, the first task he did was to set up the Bernese Solar Wind Composition experiment (SWC) also known as the "solar sail" by planting it in the ground of the moon, even before the American flag. This experiment, which was planned and the results analysed by Prof. Dr. Johannes Geiss and his team from the Physics Institute of the University of Bern, was the first great highlight in the history of Bernese space exploration.

Ever since Bernese space exploration has been among the world's elite. The numbers are impressive: 25 times were instruments flown into the upper atmosphere and ionosphere using rockets (1967-1993), 9 times into the stratosphere with balloon flights (1991-2008), over 30 instruments were flown on space probes, and with CHEOPS the University of Bern shares responsibility with ESA for a whole mission.

The successful work of the [Department of Space Research and Planetary Sciences \(WP\)](#) from the Physics Institute of the University of Bern was consolidated by the foundation of a university competence center, the [Center for Space and Habitability \(CSH\)](#). The Swiss National Fund also awarded the University of Bern the [National Center of Competence in Research \(NCCR\) PlanetS](#), which it manages together with the University of Geneva.

Exoplanet research in Geneva: 24 years of expertise awarded a Nobel Prize

CHEOPS will provide crucial information on the size, shape, formation and evolution of known exoplanets. The installation of the "Science Operation Center" of the CHEOPS mission in Geneva, under the supervision of two professors from the [UniGE Astronomy Department](#), is a logical continuation of the history of research in the field of exoplanets, since it is here that the first was discovered in 1995 by [Michel Mayor and Didier Queloz, winners of the 2019 Nobel Prize in Physics](#). This discovery has enabled the Astronomy Department of the University of Geneva to be at the forefront of research in the field, with the construction and installation of [HARPS](#) on the ESO's 3.6m telescope at La Silla in 2003, a spectrograph that remained the most efficient in the world for two decades to determine the mass of exoplanets. However, this year HARPS was surpassed by ESPRESSO, another spectrograph built in Geneva and installed on the VLT in Paranal.

CHEOPS is therefore the result of two national expertises, on the one hand the space know-how of the University of Bern with the collaboration of its Geneva counterpart and on the other hand the ground experience of the University of Geneva supported by its colleague in the Swiss capital. Two scientific and technical competences that have also made it possible to create the [National Center of Competence in Research \(NCCR\) PlanetS](#).

Yours sincerely
Media Relations
University of Bern