

Press release

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Astronaut Claude Nicollier speaks at the Empa Academy about «Progress in Space»
«We have fitted the Hubble Space Telescope with eye glasses»

Since October of 2005 Empa at regular intervals invites well known persons to lecture at its academy. In the past two years, TV journalist and China expert Peter Achten and his colleague Ulrich Tilgner, the Near East specialist, were among those who occupied the lectures at Empa. Last Tuesday, Claude Nicollier, the first Swiss in space, was a guest lecturer and enthralled a large audience with his lecture on «Progress in Space». The astrophysicist and Astronaut who flew into space four times and managed to help repair the Hubble Space Telescope talked about manned space flights and his own experiences. Nicollier is convinced that man will reach Mars in this century.

Breath taking photos from space, of the earth, Astronauts space walks, or the International Space Station with a docked space shuttle, were offered as part of the lecture attended by about 350 visitors. Still, someone who flew into space four times has a lot to tell and not only show pretty «vacation pictures». Nicollier's enthusiasm of space exploration was quite contagious. Our neighbor, the planet Mars is the next logical goal and will be achieved soon according to Nicollier. «The first humans will land on Mars by 2030», predicted Nicollier. «Were I younger I would immediately take part in a Mars mission.»

Life in other Galaxies

The Astronaut shared another conviction with the audience. «I think that there exists some sort of life in space.» While the formation of life is a complex process, it is also practically inevitable, on account of the unimaginable vastness of the Universe, and the immense age of the Cosmos, that other planets at some time also experienced some sort of an evolutionary process. «There exist thousands of Galaxies with each of them containing up to 100 billion stars, and many of them have a planetary system», explained Nicollier. Considered statistically, there must exist «out there» some sort of a life form, «but, I have not met any in my space walks.»

Space walk in the fourth mission

Enthusiasm for the wide spaces of the universe seized Claude Nicollier already in childhood. The astrophysicist was already as a youth an avid aficionado of airplanes and flying. As an accomplished military and civilian pilot he was sent in 1980 by the European Space Authority ESA to Houston Texas to NASA's Astronauts Training Center, where he spent twelve long years in preparation for his first space flight. Part of

this preparation took place in an oversized swimming pool where future astronauts learned to handle weightlessness. Nicollier's second mission in 1993 brought him to the space telescope Hubble which needed some repairs. During five days and five space walks (alas without Nicollier since his duties demanded that he stay on board of the space ship), «we fitted the Hubble telescope with eye glasses because it no longer could see well.»

After a third space flight in 1996, Nicollier, during his fourth flight in 1999, finally got his chance to work outside the space ship. During an eight hour repair job on the Hubble Telescope, he saw five sun ups and sunsets. «Though, one does not feel any movement as up there, there is no wind, yet one moves at a speed of 27'000 kilometers per hour», said Nicollier. «At this speed I flew over all of Switzerland in 30 seconds.» Of central importance to manned flights is the «International Space Station» (ISS). On the 8th of June this year, the most recent mission with six Americans on board, took off to enlarge the ISS. A second solar panel is to be installed, and by the end of the year 2010, the ISS project should be completed. For Nicollier this is a happy prospect, albeit tinged with a drop of bitterness. Because, «at the same time, the Space Shuttle, after 29 years of service is to be retired and replaced by a space capsule which is scheduled to be ready by 2014» according to Nicollier. The space glider is too expensive and also dangerous.

«Space for everyone»

Up to its replacement, the space shuttle will still be used in several missions. It can transport up to seven persons into space, among whom, since 2001, «well padded space tourists» may be found. Nicollier prefers to rather speak about «space for everyone». «I recommend to everyone to once go out there. One gets there relatively fast, in just eight and a half minutes», joked the astronaut, while in the same breath also pointing out the horrendous costs entailed in such a fun flight. Nicollier thinks that the current price of two digit millions will sink rapidly. «Virgin Galactic», a Richard Branson enterprise, is planning to offer by the end of 2008 space flights for everyone, for the «affordable price of» 200'000 Dollar.

Hotels in space?

For future space flights Nicollier stressed two points: on the one hand there should be another moon mission completed by 2018, and on the other experts believe that in this century man will reach Mars. This fact should motivate the astronauts of tomorrow said Nicollier in an advertisement for his profession. While today no one yet believes in hotels in space, such a possibility should not be completely ignored.

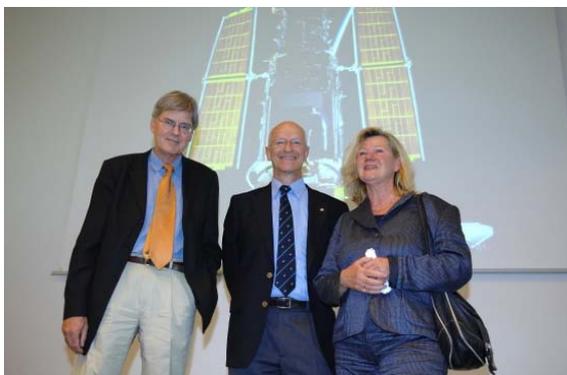
Claude Nicollier sees his own personal future in transmitting his knowledge and experience to the next generation of space enthusiasts as well as to the wide public. At the same time he continues to engage in the professional activities of space travel. Right now he is responsible, for example, for the selection of ESA future Astronauts. Nicollier wishes that among them, there shall soon be another Swiss man or even a woman.

Editorial

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Claude Nicollier during his presentation.



Dr. Peter Hofer (Deputy Director Empa), Claude Nicollier, Inge Krombach (organizer) (from left to right).



Contre-jour picture of the Hubble Space Telescope.