Charles University's Institute of Political Studies,
Prague Security Studies Institute and American Center

Invite you to a public guest lecture organized as part of a Master's Degree Course entitled
"Space Security in the 21st Century"
on the topic of:

SPACE SECURITY

Dr. Jan Kolář, Director, Czech Space Office (CSO)
May 6, 2019, 18:00

THE MOON BECOMES A SUBJECT OF NEW SPACE COMPETITION

Jan Kolář graduated in nuclear physics and received his Ph.D. degree in space physics at the Czech Technical University in 1978. He was a member of the Czechoslovak Committee for Space Research from 1984 to 1992. He lectures on the topic of satellite Earth observation at the Charles University in Prague.

In the second half of the 1990's, he initiated the building of the Czech relationship with the European Space Agency (ESA). After the Czech Republic became a full member of ESA in 2008, he was head of the Czech delegation in ESA until 2011. He represented the Czech Republic at the High Level Space Policy Group of the European Union in 2004-2011. He was a Vice-President of the International Astronautical Federation (IAF) in 2012-2016 and a member of International Academy of Astronautics' Board of Trustees in 2011-2013. He is a Founder and Director of the Czech Space Office providing consultancy in international space projects management and presenting space achievements and benefits to public.

The lecture will focus on the actual plans for the human space exploration beyond the low Earth orbit and their implications for international cooperation. While planet Mars was considered as a primarily target for the next human mission to deep space in the first half of this decade, the Moon now takes priority in the human spaceflight programs of spacefaring countries for the next decade. Since a human mission of this scale requires resources exceeding current budget of any single space agency, the joint effort of several countries is indispensable requirement for accomplishment of such endeavour.

Today, there are three nations capable of launching humans to space – the U.S., Russia and China. But only American astronauts from six Apollo missions walked on the Moon starting from Apollo 11 lunar landing 50 years ago. Today, the intention of the human mission to the Moon is included in the space programs of all of these three countries, but with different level of details. While the U.S. plan includes small habitable station on the lunar orbit built with international partners (i.e. Europe, Canada and others) to be followed by a crew landing on the surface of the Moon in the middle of the next century, Russian and Chinese plans put similar missions to the 2030s. The governments of all three countries are still to allocate financial resources and to decide on the final technical designs of such missions.

Robotic lunar missions have been accomplished and are under preparation in several other countries. Europe, Japan and India have had their lunar orbiters working in vicinity of the Moon in the past years. At the beginning of this year, Chinese probe Chang'e 4 landed on the far side of the Moon. And just last month the Israeli probe Beresheet became the first lunar orbiter built and controlled by a commercial company.

Commercial companies are on the verge of making space around, and on, the Moon more accessible using own platforms carrying experiments and later also spaceships for humans. Depending on the interest of potential customers, commercial activities can substantially complement governmental space programs. If this trend continues, the pace of acceleration to obtain the means to explore space could pick up dramatically.

The lecture will take place at **The American Center** Trziste 13, Prague 1. Please register at **registrace@pssi.cz by May 6, 2019.**