## SPACE AND ARTIFICIAL INTELLIGENCE

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## Artificial Intelligence in Space in an age of deep Industrial Transformation

Name and affiliation of the keynote speaker:

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Artificial intelligence is central to space activities. This place is all the more important since the main purpose of these activities is the design, construction, launching, placing in orbit and operation of remote space objects, which are called upon to operate in a hostile environment with which they must be able to interact with or without the help of ground stations. However, artificial intelligence in space is still limited to the implementation of techniques inspired by deep learning, i.e. machine programming. Time still seems far away when we will see perfectly autonomous objects, capable of evolving by themselves and spontaneously choosing the solution imposed by the difficulties they face. Will the transformations that the space sector may undergo post-Covid-19 allow us to go beyond what is currently being done in the field of artificial intelligence in space? Will they not be opposed to it? Will artificial intelligence in space

## Short Biography:

Professor Rapp lectures at the Law School of the University of Toulouse, where he has been holding a tenure position from 1988, and teaches international business law and competition law. He acts currently as the scientific director of SIRIUS (Space Institute for Research on Innovative Uses of Satellites), an academic chair created in 2013 by its three sponsors: CNES, Airbus Defense and Space (ADS) and Thales Alenia Space (TAS). Professor Rapp is a member of several international scientific societies (including the International Institute for Space Law) and authored – to date - 10 books and a hundred scientific communications on various legal aspects of space communications. As an expert of legal issues relating to space matters, he has acted as an expert-consultant to several French and international organizations, including the International Law in The Hague, and the International Telecommunications Union. Professor Rapp was awarded the Academic Palms (Officer, 2009) and is a Chevalier of the Legion d'Honneur (since 2011).