

Doctoral Seminar

2-day Course: 1st Session: 1 & 2 July 2021

2nd Session: 15 & 16 July 2021

Prof Christophe Roche
University Savoie Mont-Blanc (France)
<http://christophe-roche.fr/>

Symbolic Artificial Intelligence

Artificial Intelligence is back in fashion. It has become efficient thanks to the technical progress made in computing power and storage capacity. Artificial Intelligence is at the heart of many applications and technological innovations in various domains: medicine, smart city, economics, digital humanities, etc. It is nowadays most often associated with Deep Learning based on neural networks. But "human intelligence is much more than just pattern recognition, and Artificial Intelligence is much more than just Machine Learning" (cyc.com). Indeed, it is not enough to be fast and efficient. There are also domains where it is necessary to explain and justify decisions taken by machines: economics, medicine, military applications, to name a few. An explicit representation of knowledge in a formalism that can be understood by both humans and machines is necessary. It is the matter of Symbolic Artificial Intelligence, so-called in opposition to Connectionist Artificial Intelligence.

