



European
Centre
for Living
Technology



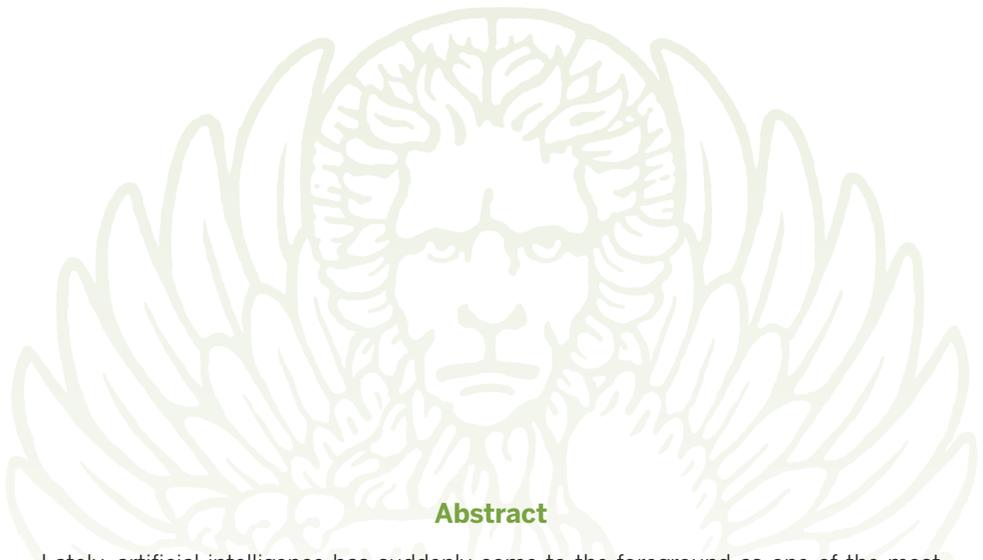
Università
Ca' Foscari
Venezia

ECLT
Christmas Lecture
2016

**Will
artificial intelligence
rule the world?**

Prof. LUC STEELS
Institut de Biologia Evolutiva, Barcelona

Thursday December 22, 2016 h 2:30 pm
Ca' Minich San Marco 2940 – Meeting Room 2nd Floor



Abstract

Lately, artificial intelligence has suddenly come to the foreground as one of the most important technologies changing the future of computer usage not only for companies but also for the public at large. Press articles and Public Relations from companies paints a picture of powerful systems that are now able to do anything, replacing doctors, translating from any language to any other language, autonomously driving vehicles even in dense city traffic, and so on. We see a real 'gold rush' going on with major companies, particularly those that thrive on the opportunities provided by the internet and ubiquitous telecommunication (Google, Microsoft, Facebook, Twitter, IBM, etc.), investing heavily in artificial intelligence and its applications.

This talk will take a critical look at these developments. Has artificial intelligence really reached the zenith of achievement that futurologists and press seem to believe? There have been serious breakthroughs - so, what are they? But what are the limitations of current artificial intelligence? How can they be overcome, indeed, if they can be overcome at all? Do we need to get worried about artificial intelligence becoming too powerful for the good of humanity? What is the impact on democracy? How will it impact the economy of the future? What is the impact on the unique human qualities that make our lives worth living: friendship, empathy, creativity, social cohesion?

Bio sketch: Luc Steels studied linguistics at the University of Antwerp (Belgium) and computer science (with specialization in Artificial Intelligence) at the Massachusetts Institute of Technology (USA). In 1983 he founded the Artificial Intelligence at the University of Brussels (VUB) and in 1996 the Sony Computer Science Laboratory in Paris which he directed until 2012. Currently he is an ICREA research professor at the Universitat Pompeu Fabra in Barcelona, associated with the Institute for Evolutionary Biology (UPF-CSIC). Steels made contributions to many areas of artificial intelligence. In the nineteen eighties he was particularly known for work on design methodologies for knowledge-based systems. In the nineties he helped launch the movement towards 'behavior-based robotics and artificial intelligence'. More recently he has concentrated on modeling the origins and evolution of human language, using computer simulations and robotic experiments. One of his major projects at the moment is the study how mass media and social media are impacting human society. Steels is a member of the European and Belgian Royal Academy. He edited a dozen books on different topics in AI and published several monographs as well as more than 150 papers, many of them in top level journals. Steels is also actively involved in the arts. He has cooperated with visual artists, such as Olafur Eliasson, and theatre pieces with director Jean-Francois Peyret (for the Avignon theatre festival). He has composed the music of two operas (Casparo and Fausto) which were performed in half a dozen cities (Paris, Brussels, Barcelona, Tokyo, etc.).