



B·Debate: Life, an instruction manual ANTONIO ACIN 'B·Debate: Towards ultra-secure communications'

ANTONIO ACIN ICFO- Institute of Photonic Sciences

June 04, 2014

Wednesday, June 4, 2014, 19.00, CosmoCaixa Barcelona

ANTONIO ACIN

ICFO- Institute of Photonic Sciences

Algorithms are groups of instructions that are used to execute problem-solving tasks. Since ancient Babylonia, 4,500 years ago, humanity has developed mathematical theorems based on algorithmic calculations to find systematic solutions to problems of all kinds and levels of complexity. Today their number and fields of application are endless.

Our daily life is completely enveloped and conditioned by activities that are only possible thanks to algorithms. The appliances we use to make breakfast, the current economic/financial situation and the weather report in the newspaper, the phones and

devices we use to communicate, the therapeutic and diagnostic equipment healthcare professionals use to heal us, the search engines we use online, the alarms and cameras that watch over us and keep us safe, the most sophisticated espionage tools, the complex machinery used to design and construct buildings, planes, roads, and all research activity, require algorithms to generate new knowledge and new technology. In short, our knowledge-based economic model is nourished by and needs the development of algorithms.

Wednesday, June 4, 2014, 19.00

Sala Agora, CosmoCaixa