

The full cost of the Conference, including accommodation in Pedralbes University Residence, is € 210.

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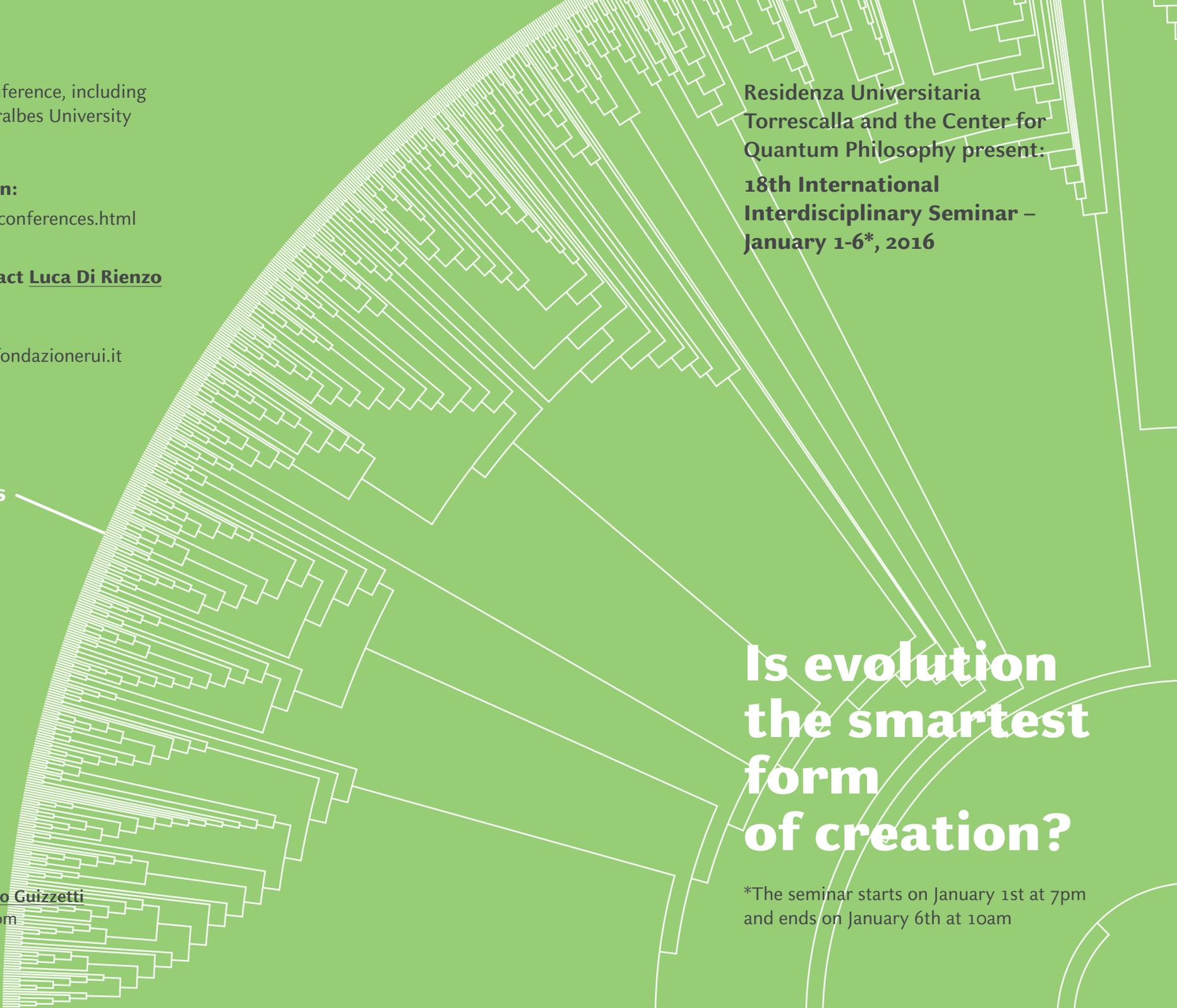
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**HOMO SAPIENS**



**Residenza Universitaria  
Torrescalla and the Center for  
Quantum Philosophy present:  
18th International  
Interdisciplinary Seminar –  
January 1-6\*, 2016**

**Is evolution  
the smartest  
form  
of creation?**

\*The seminar starts on January 1st at 7pm  
and ends on January 6th at 10am

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## The conference

SINCE SCIENCE IS BASED ON OBSERVATIONS, ANY world capable of scientific description requires by definition the existence of observers. As far as Evolution is a scientific description it is obvious that 'natural selection' refers to a process that leads to human observers (otherwise there would be no 'science based on observations'). And it is remarkable to observe that the *disappearance of intermediate varieties* makes it possible to have a human species sharply separated from other forms of life, even from great apes. Additionally, even passionate advocates of natural selection like Richard Dawkins claim that 'We should not live by Darwinian principles [...] one of the reasons for learning about Darwinian evolution is as an object lesson in how not to set up our values and social lives.' From all this it seems to follow that evolution aims to bring about the conditions for moral and legal responsibility. And the question arises: **How can we ascertain the moment in evolution at which this happens?**

The concept of observer implies necessarily the principle of conservation of personal identity. Everyone takes for granted that his or her personal identity remains conserved overnight: I am the same person today as yesterday. We all seem to agree on this, and for a good reason, since otherwise the basis for e.g. authorship and property rights would

disappear. *Conservation of personal identity* can be considered a basic axiom of science.

Nevertheless, Quantum Physics and Relativity taken together imply that not only are energy and matter quantized, but even space-time itself is quantized; in some of the theories of fundamental physics, space-time is discrete or atomic. Consider what happens if we apply a similar line of reasoning in neurobiology: between my neurons today and my neurons yesterday there is no continuous material connection. This suggests that material objects actually have a broken existence resembling the figures in a pixelated laptop screen; *only persons can be considered to exist unbrokenly*. In what sense, therefore, do we say that we live, move and are in space-time? Should we join some prominent atheists in asserting that we are permanently popping out of nothing? Or is it sounder to conclude that our personal identity comes out of consciousness? Nonetheless during the periods of dreamless sleep we (human persons) completely lose consciousness and are not aware of our own existence. Thus the question arises who is the ever conscious personal being, in whom we live, move and are. On the other hand, views postulating that any animal and even any macroscopic object is a unity, implicitly assume that this unity is not underpinned by a space-time continuum but rather refers to some personal activity. **So the question also arises how this activity should be understood.**

Paraphrasing a comment about the movie *Interstellar* we could say that our Seminar is important because 'amid all the culture wars between science and faith and science and the humanities', the Seminar 'illustrates the real *symbiosis* between these realms. [...] Vast social engineering projects look less promising, because of the complexity, but webs of loving and meaningful relationships can do amazing good.' (*New York Times*, 20.11.2014).

**If you would like to contribute to seminars on these subjects by giving a talk, or if you would simply like to participate in the discussions, or if you are just interested in these fundamental questions even if you are not a scientist: you are welcome to our seminar in Barcelona 1 to 6 January 2016.**