

## **Report LRR10 – The Reasoner**

(by Mathieu Beirlaen, Tjerk Gauderis, Raoul Gervais & Laszlo Kosolosky)

From September 20th till 22th, the Centre for Logic & Philosophy of Science at Ghent University (Belgium) organized LRR10, a conference on Logic, Reasoning and Rationality.

This conference counted seven plenary speakers:

In the opening lecture of the first day, Graham Priest took logic to be a full-fledged science with validity as its subject, arguing that logic can be evaluated along empirical lines, just like any other science. In this way, an informed choice can be made between different logics, using criteria for rational theory choice traditionally proposed by philosophers of science. In an attempt to bring order in the jungle of “maximally” paraconsistent logics, Arnon Avron introduced his own notion of maximal paraconsistency, and illustrated the workings of this notion within matrices of existing three- and more-valued paraconsistent logics.

The second day was opened by Thomas Nickles, who compared the Ghent research program in logic and philosophy of science to the evolutionary epistemology of Donald Campbell, concluding that both projects are similar in spirit, although they differ in style. In her talk, Giovanna Corsi proposed a new box operator for epistemic logic that enables one not only to quantify over knowledge contents, but also over knowledge holders. Nancy Nersessian presented a case study from neuro-engineering to illustrate some of her points about constructing models in science.

At the start of the third day, Andrzej Wiśniewski approached problem-solving as an internal goal-directed process. To attain this, he presented an erotetic logic or “question-logic” that tries to formally capture the proper dynamics of internal question processing. LRR10 served as an excellent opportunity for Diderik Batens - at the verge of his retirement - to look back on his long and distinguished academic career and clarify to the audience his personal views. Among other things, Batens helped shape paraconsistent logic and was a pioneer within the field of adaptive logic.

Apart from these plenary lectures, parallel sessions on diverse topics within logic and philosophy of science were organized. Within the field of logic, lectures were given on subjects as inconsistency adaptive logic (Rafal Urbaniak), adaptive deontic logic (Mathieu Beirlaen, Joke Meheus, Christian Straßer, Frederik Van De Putte) ‘fuzzy’ adaptive logic (Stephan van der Waart van Gulik), heuristic adaptive logic (Dagmar Provijs, Peter Verdée), relevant adaptive logic (Hans Lycke), computational logic (Liesbeth De Mol) and paraconsistent logic (Stefan Wintein, Itala D’Ottaviano, Marek Nasieniewski). The Philosophy of Science lectures dealt with topics such as mathematics (Jean Paul van Bendegem), justification (Dunja Seselja), inconsistency (Erik Weber), abduction (Andres Rivadulla), contextualism (Merel Lefeverre), scientific change (Rogier de Langhe), explanation (Raoul Gervais), rationality (Tim de Mey, Werner Callebaut), history of science (Albrecht Heeffer, Steffen Ducheyne), paradoxes (David Etlin), artificial intelligence (Antonio Lieto), modeling (Jan Willem Wieland) and many more.

On a personal note, we would like to express our gratitude for our most beloved Ghent logician through the words of Thomas Nickles: “If I had a glass of wine, I would toast Diderik Batens, not only to congratulate him on his magnificent career and his wonderful personality, but also to hope and expect that he will continue to live forward!”