

**Report on the ICHM Co-Sponsored Meeting *Bolzano in Prague 2014*
Villa Lanna, Prague, Czech Republic, July 16 – 19, 2014**

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Thirty-five participants from thirteen different countries met over four days, 16th – 19th July, 2014, at Villa Lanna for an International Symposium on the work and thought of Bernard Bolzano. The meeting was jointly organised by the Academy of Sciences of the Czech Republic (Institute of Philosophy), the International Bernard Bolzano Society, and the University of Amsterdam. Arguably Bolzano was one of the leading European philosophers of the nineteenth century - though the range, depth and originality of his contributions in philosophy, theology and in mathematics, began to be fully appreciated only in the twentieth century. Earlier this year the first complete English translation of Bolzano's major, four-volume, work, *Wissenschaftslehre (Theory of Science)*, dating from 1837, was published by Oxford University Press. We were pleased to have one of the translators and editors (Paul Rusnock) of this magnificent edition at our meeting and giving one of the long talks on 'Bolzano on Necessary Existence' (being joint work with Stefan Roski). Other long talks, also followed by two commentators, were given by Wolfgang Künne on 'On Having a Property. Corrigenda in Bolzano's *Wissenschaftslehre*' and by Stefan Roski and Antje Rumberg on 'Simplicity and Economy in Bolzano's Theory of Grounding'. Two further long presentations were those of Benjamin Schnieder on 'Bolzano on Causation and Grounding' and that of Steve Russ and Kateřina Trlifajová on 'Bolzano's measurable numbers – are they real?'

Most participants came from philosophy departments but departments of theology and mathematics were well represented too at this meeting. In addition to the lectures mentioned above there were twenty-five further presentations of medium or short length. (Overall there were eight presentations with substantial mathematical content, and four or five were on theological subjects.) Most presenters followed the request to allow half of their allocated time for discussion. This led to a most welcome feature of the meeting, that there was plenty of time for extended and varied discussion of each presentation. Although there were ten or eleven presentations on each of the full-length days, the spacing and breaks were such that it did not feel unduly rushed, or pressured. At least half the value of most conferences lies not in the main sessions but in the informal networking and discussions in between, and around, sessions. This meeting was no exception, and the very convenient layout at Villa Lanna of buffets, coffee breaks, terrace (and the good weather!) were conducive to most people taking full advantage of these opportunities.

Three further features of the meeting, all illustrating the current vigour of Bolzano studies, are noteworthy. First there was Bolzano 'news' (in three sessions led by Arianna Betti) which celebrated recent and prospective publications, new software tools for philosophers with applications for Bolzano, and discussion of how best to move forward with our meetings on Bolzano's work. Then among the participants there were nine research students ranging from some who had almost completed their PhD theses to others who were just beginning. Several of these students did not know about each other so this contact was already a useful function of the meeting. One of these students, Lukas Kraus, was having his thesis published very shortly after the meeting in the series *Beiträge zur Bolzano-Forschung* (Academia Verlag). Finally, as a background to all the presentations, and included in many of their bibliographies, were references to the volumes of the ongoing *Bernard Bolzano Gesamtausgabe*, published by Frommann-Holzboog, Stuttgart. Ninety-three of the projected one hundred and twenty-nine

volumes have appeared already, many of the remaining volumes are 'in the pipeline', and so the end of this magnificent publication series really is in sight. These volumes are greatly enriching and extending the primary resources available to Bolzano scholars.

As a final treat, for those who could stay on after the presentations, there was a 'Bolzano Trail' – a walking tour visiting places in both the Old and New Town of special interest associated with Bolzano's life and work. In spite of the heat, and the brisk pace required, everyone was inspired and encouraged by the great enthusiasm, energy and extensive knowledge of our guide Alena Šolcová.

The meeting was supported financially, and in services, by the University of Amsterdam, the Academy of Sciences of the Czech Republic (in particular the Institute of Philosophy), the International Bernard Bolzano Society, The International Commission for the History of Mathematics, and a Trust that wishes to remain anonymous. We are pleased to acknowledge gratefully the contributions of all these institutions which together made a substantial impact on the costs for all participants and allowed for a number of bursaries to research students.

A forerunner to this meeting was a much more informal (and slightly chaotic!) meeting in Prague in 2010 (http://www2.warwick.ac.uk/fac/sci/dcs/people/steve_russ/pmb10). That meeting was 'by invitation' only. In contrast, this meeting had quite a widely publicised 'Call for Papers' and consequently had many more submissions and presentations. The scientific organiser in the Institute of Philosophy (AVČR) was Ladislav Kvasz. Much of the detailed planning was by Arianna Betti (Professor in Philosophy of Language, University of Amsterdam) with assistance from Pam Rossel. This work included invitations to the Programme Committee, the detailed planning of the programme and the budget, and the construction and maintenance of the website. Many details of the meeting, including the programme and committee members, can be found at <http://bolzano2014.wordpress.com/>. At present the slides from presentations, hand-outs, and in some cases full papers, are available only to participants. Some have recently been published, others are on the way to publication. We wish to make all the materials as widely available as possible, but without jeopardising potential publications. Details of publications, and the availability of presentations, will be posted on the website in due course.

Steve Russ (formerly Associate Professor in Computer Science at the University of Warwick, UK) helped to co-ordinate the local organising group and act as a link with Arianna Betti and Pam Rossel. The local organising group consisted of Magdalena Hykšová, Petra Ivaničová, Ladislav Kvasz, Steve Russ, Alena Šolcová, Kateřina Trlifajová. They devoted a great deal of time to preparatory discussions, and then much work, to ensure the numerous practical arrangements went smoothly for all participants. It was a much appreciated support for participants that the registration desk was staffed throughout the meeting by both Pam Rossel and Petra Ivaničová. Our thanks also go to all the staff at Villa Lanna who provided for all our needs with service, catering, rooms, equipment and accommodation of a very high standard.

MATHEMATICAL CONTRIBUTIONS TO *BOLZANO IN PRAGUE 2014*

Peter Simons *Bolzano, Conditional probability, and Monty Hall*

Magdalena Hykšová, *Probability theory and its philosophical interpretation in the work of Bernard Bolzano*

Elias Fuentes Guillén, *Some remarks about Bolzano's mathematical sources (1804 – 1817)*

Steve Russ, *Conceptual Geometry*

Libor Koudela, *Bernard Bolzano and the Conception of a Curve*¹

Lukas Kraus, *Bernard Bolzano's theory of physical surfaces*²

Steve Russ and Kateřina Trlifajová, *Bolzano's measurable numbers*

¹ Related to the author's book, *O Pojetí Křivky* OPS, 2013.

² Related to the author's recently completed thesis soon to be published as: *Der Begriff des Kontinuums bei Bernard Bolzano* in the series *Beiträge zur Bolzano-Forschung*, Academia Verlag, 2014.