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Computability and Complexity in Analysis
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This special issue of the Journal of Universal Computer Science (J.UCS) contains a selection of 12 articles in the area of Computability and Complexity in Analysis. Many, but not all of them were presented at the Sixth International Conference on Computability and Complexity in Analysis, CCA 2009, that took place on August 18 – 22, 2009 in Ljubljana, Slovenia. It was the 15th event in a series of workshops, seminars and conferences in this area. For more information about CCA see http://cca-net.de.

The conference and this special issue are concerned with Computable Analysis, the theory of computability and complexity over real-valued data. Computability theory studies the limitations and abilities of computers in principle. Computational complexity theory provides a framework for understanding the cost of solving computational problems, as measured by the requirement for resources such as time and space. In particular, Computable Analysis supplies an algorithmic foundation for numerical computation.

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