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## Dear Colleagues,

This issue is the first of two special issues of the *Interval Computations* journal that focus on parallel algorithms of interval computation, their implementation, and application of such algorithms to scientific, engineering and data processing problems.

For many numerical problems, traditional algorithms do not guarantee any accuracy of the answer. It takes an extra effort to come up with a guaranteed accuracy. Therefore, methods of interval computations (i.e., methods that produce such a guaranteed accuracy), require more computation time than traditional numerical algorithms. Hence, for interval algorithm, there is often an urgent need to decrease this computation time. The natural way to decrease this time is to use several processors working in parallel.

These issues present a broad range of parallel interval algorithms and their applications. We hope that this is just the beginning: with the price of parallel computers going down (so that even off-the-counter PC's often have a co-processor that can work in parallel with the main one), parallel computations will become more and more wide-spread.

These issues were not initially intended as a continuing series, but if there are sufficiently many new interesting papers (and judging by several very late submissions that we had to decline, there are some), we would be glad to collect papers for new parallel issues. If you are interested in submitting such a paper, please contact us and/or the editors of the Journal.

Now, our thanks.

- First, we would like to thank all the authors for their excellent job.
- Second, our thanks to anonymous referees for their thorough and unrewarding job of reviewing the papers.
- Several papers from these issues have been presented at a special session "Languages for parallel scientific computation", organized by Prof. Dr. J. Wolff von Gudenberg at the CSAM'93 conference in St. Petersburg. We are thankful to Prof. Dr. Wolff von Gudenberg who organized the refereeing and editing of these papers.
- And, last but not the least, our thanks to the editors of the *Interval Computations*, who encourages us to organize these special issues, and kept gently reminding us about the deadlines. We are especially thankful to Slava Nesterov, Sasha Yakovlev, and finally, to Eldar Musaev, who undertook the complicated task of combining papers written in different slangs of TeX, into journal volumes.

Thanks to all of you! And also, thanks to the readers, because it is for them that these issues have been composed. We would like to have feedback from the readers, and (since future "parallel" issues are a possibility) future recommendations are more than welcome.

> Andrew Bernat and Vladik Kreinovich Co-editors of the "Parallel" Issues

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