

PRELIMINARY ANNOUNCEMENT
CALL FOR PAPER'S
and
FURTHER INFORMATION
for
A Conference on
**NUMERICAL ANALYSIS WITH
AUTOMATIC RESULT VERIFICATION**
Mathematics, Applications, and Software
February 25 through March 1, 1993
Lafayette, Louisiana

General Information

Interval analysis is applicable in scientific computations in which reliability or automatic verification, or mathematical rigor in computational results is desirable.

This conference has the following goals.

- To provide an accessible forum for researchers in the field to exchange the most recent results in interval computations.
- To further delineate the rôle of interval computations in practical (applied and industrial) problems, and to identify tasks which must be completed to facilitate its optimal use in such settings.
- To highlight the rôle of interval mathematics in more purely academic pursuits, such as automatic theorem proving.

Theory, software, computational results, etc. will be presented.

Topics covered include, but are not limited to

- ARITHMETIC
- PROGRAMMING LANGUAGES AND GENERAL SOFTWARE TOOLS
- NONLINEAR SYSTEMS OF EQUATIONS
- NONLINEAR OPTIMIZATION
- QUADRATURE

- ORDINARY DIFFERENTIAL EQUATIONS
- PARTIAL DIFFERENTIAL EQUATIONS
- SENSITIVITY ANALYSIS
- LINEAR ALGEBRA AND LINEAR OPERATORS
- INDUSTRIAL AND SCIENTIFIC APPLICATIONS

We plan to publish a refereed proceedings.

Program Committee

- G. Alefeld (University of Karlsruhe)
- G. Corliss (Marquette University)
- B. Kearfott (University of Southwestern Louisiana)
- U. Kulisch (University of Karlsruhe)
- H. Stetter (Technical University of Vienna)

Some Tentative Attendees

The following people have expressed an interest in attending and speaking.

- O. Aberth (Texas A. & M. University)
- G. Alefeld (University of Karlsruhe)
- G. Corliss (Marquette University)
- A. Frommer (Universität Karlsruhe).
- D. Gay (AT&T Bell Laboratories)
- G. Hager (Yale University)
- E. Hansen (Los Altos, California)
- J. Herzberger (Universität Oldenburg)
- U. Kulisch (Universität Karlsruhe)
- K. Madsen (The Technical University of Denmark)
- S. Markov (Bulgarian Academy of Sciences)
- T. Mattson (Yale University)
- W. Miranker (IBM T. J. Watson Center)
- E. Musaeu (Steklov Mathematical Institute, St. Petersburg)
- A. Neumaier (Universität Freiburg)
- M. Novoa (University of Southwestern Louisiana)
- V. Nesterov (Russian Academy of Sciences)
- B. Peek (Oregon Advanced Computing Institute)
- L. Rall (University of Wisconsin at Madison)
- H. Ratschek (Universität Düsseldorf)

- G. Rex (Universität Leipzig)
- S. Rump (Universität Hamburg)
- C. Schnepfer (Univ. of Illinois at Urbana-Champaign)
- H. Stetter (Technical University of Vienna)
- W. Walster (Sun Computers)
- A. Yakovlev (Institute for New Technologies, Moscow)

Call for papers

Papers and additional speakers are welcome. Contributors should send a one page abstract to

Numerical Analysis with Automatic
Result Verification Conference
C/O R. Baker Kearfott
Department of Mathematics
University of Southwestern Louisiana
U.S.L. Box 4-1010
Lafayette, LA 70504-1010
Office phone: (318) 231-5270
Home phone: (318) 981-9744
email: rbk@usl.edu (Internet)

We are planning a poster session and facilities for demonstration of software. Please state your needs if you wish to use such a format.

The abstract may be sent via electronic mail if it is in some version of \TeX or in an ASCII format.

Conference Proceedings

Papers for the conference proceedings should be prepared by the time of the conference or shortly thereafter. Details will be forthcoming.

Conference Location

The conference will be in Lafayette, Louisiana in conjunction with the University of Southwestern Louisiana.

Lafayette, a town of approximately 100,000 with no heavy industry, is the center of Cajun culture, and has the 16,000 student University of Southwestern Louisiana, the second largest public university in Louisiana. The surrounding region is rich subtropical agricultural delta.

The conference begins two days after Mardi Gras. There are traditional (Cajun) Mardi Gras celebrations from the seventeenth century near

Lafayette, and Lafayette is 2.5 hours by car from New Orleans. Outdoor activities include boating and fishing, with nearby state parks, botanical gardens, and the Achafalaya swamp. There should be floral blooms during the conference. There are two operating replicas of traditional Cajun villages near Lafayette.

The average high temperature in late February is around 68°F and the average low is around 45°F, but with substantial variation.

Social Events

Social events will include a crawfish boil, as well as other activities to sample the Acadian culture.

Accommodations

The conference will be held at the Lafayette Holidome (Holiday Inn Central), a full-service hotel with various amenities, but reasonably priced. Inquire for further information.

Further Information

To obtain further information, send the following form to:

Numerical Analysis with Automatic
 Result Verification Conference
 C/O R. Baker Kearfott
 Department of Mathematics
 University of Southwestern Louisiana
 U.S.L. Box 4-1010
 Lafayette, LA 70504-1010
 Office phone: (318) 231-5270
 Home phone: (318) 981-9744
 email: rbk@usl.edu (Internet)

FURTHER INFORMATION FOR THE
1993 CONFERENCE ON NUMERICAL ANALYSIS
WITH AUTOMATIC RESULT VERIFICATION

- Please send me more information about the February, 1993 International Conference on Numerical Analysis with Automatic Result Verification.
- I am unable to participate.

Name: _____

Address: _____

City: _____

State, Province, or Country: _____

Zip or Postal Code: _____

Telephone: _____ (optional)

Fax: _____ (optional)

email: _____ (optional)
