THIRD ANNUAL ACM SYMPOSIUM ON THEORY OF COMPUTING

The Third Annual ACM Symposium on The Theory of Computing, sponsored by SIGACT and Case Western Reserve University, will be held May 3, 4 and 5, 1971 at Stouffer's Somerset Inn in Shaker Heights, Ohio. An abbreviated schedule is provided below. Please note the SIGACT meeting at 8:00 P.M. on May 3.

All papers will be published in proceedings available at the conference. They may be ordered after the conference from the ACM order department for \$10. Proceedings from the previous conferences may be obtained in the same way.

Somerset Inn is located at the junction of Rt. U.S. 422 and Ohio 8 in Shaker Heights. Take U.S. 422 (Chagrin Blvd.) exit from I-271 and follow 422 about 2 miles west to Inn. From Cleveland airport, hourly limousine service to area motels, including Somerset is available (\$3.25 one way). Quickest way to Inn from the airport is via Rapid Transit. Take CTS Rapid from airport to either Union Terminal or Campus Station (exact fare 75¢). Transfer to Shaker Rapid Lines, Van Aken Local, and ride to end of line (50¢). Somerset Inn is directly opposite Rapid Stop.

Weater is mild (50° average) and showers are likely.

Room reservations should be sent to the Inn directly. Rates are \$14.50 single; \$19.00 two persons, one bed; \$20.00 two persons, 2 twin beds; and \$22.00 two persons, 2 double beds. Room sharing is advised. The address is: Stouffer's Somerset Inn

3550 Northfield Road Shaker Heights, Ohio 44122 Rooms cannot be guaranteed after April 21.

Housing for students at greatly reduced rates may be available on CWRU campus.

Registration fees are as follows:

Author	\$25
ACM and SIGACT Member	\$32
SIGACT or ACM Member Only	\$35
Others	\$40
Students	\$10

Fees (except author and student) increase by \$5 if not pre-registered. Student registration includes proceedings and coffee. Send checks (payable to ACM-SIGACT) to:

> Prof. Wm. C. Rounds Mathematics Dept. Case Western Reserve University Cleveland, Ohio 44106

Helping W. C. Rounds with local arrangements is Ranon Banerji; Conference Chairman is Michael A. Harrison; Program Chairman is Philip M. Lewis II; Publicity Chairman is Jeffrey D. Ullman.

PRÖGRAM

MONDAY, MAY 3	
SESSION 1:	9:00 A.M. (A. L. Rosenberg, Chairman) Formal Languages and Power Series, D. F. Stanat An Algebraic Theory of Recursive Definitions and Recursive Languages, E. G. Wagner Loop Schemata, R. L. Constable Some Results Concerning Efficient and Optimal Algorithms, I. Munro Fast Matrix Multiplication, C. M. Fiduccia
LUNCHEON	12:30 P.M.
SESSION 2:	2:00 P.M. (J. W. Thatcher, Chairman) Proving Simultaneous Positivity of Linear Forms, M. O. Rabin Linear Representation of Tree Structure, W. J. Meyers On Generalized Finite Automata and Unrestricted Generative Grammars, H. W. Buttelmann Some Results in Tree Automata, L. S. Levy and A. K. Joshi
SIGACT MEET	ING 8:00 P.M.
TUESDAY, MAY 4	
SESSION 3:	9:00 A.M. (P. M. Lewis II, Chairman) Block Structure: Retention or Deletion?, D. M. Berry Parallel Computation of Local Operations, S. K. Chang An Iteration Theorem for One-Counter Languages, L. Boasson Intersection-closed Full AFL and the Recursively Enumerable Languages, S. Ginsburg and J. Goldstine Absolutely Parallel Grammars and Two-Way Deterministic Finite-State Transducers, V. Rajlich
LUNCHEON	12:30 P.M.
SESSION 4:	2:00 P.M. (M. J. Fischer, Chairman) Addressable Data Graphs, A. L. Rosenberg The Complexity of Theorem-Proving Procedures, S. A. Cook The Care and Feeding of LR(k) Grammars, A. V. Aho and J. D. Ullman Domolki's Algorithm Applied to Generalized Overlap Resolvable Grammars, D. S. Wise An Algorithm Generating the Decision Table of a Deterministic Bottom-Up Parser for a Subset of Context-Free Grammars, G. Terrine

WEDNESDAY, MAY 5 SESSION 5: 9:00 A.M. (P. R. Young, Chairman) A Decision Procedure for Generalized Sequential Mapability Onto of Regular Sets, R. McNaughton Algebraic Structure Theory of Stochastic Machines, E. S. Santos Complexity of Formal Translations and Speed-Up Results, R. L. Constable and J. Hartmanis Classification of Computable Functions by Primitive Recursive Classes, M. Machtey Complexity Classes of Partial Recursive Functions, E. L. Robertson

UPCOMING CONFERENCES

LOGIC, METHODOLOGY AND PHILOSOPHY OF SCIENCE

The Fourth International Congress for Logic, Methodology and Philosophy of Science will be held in Bucharest, Romania, August 29 to September 4, 1971, under the auspices of the International Union for the History and Philosophy of Science. Topic areas of interest are:

> Mathematical logic Foundations of mathematical theories Automata and programming languages Philosophy of logic and mathematics Foundations of probability and induction Methodology and philosophy of the physical, biological, psychological, historical, and social sciences, and linguistics History of logic, methodology and philosophy of science

Information about fees, housing, and other details may be obtained by writing:

Professor Solomon Marcus, Secretary General Romanian Organizing Committee 1971 International Congress for Logic, Methodology and Philosophy of Science Calea Victoriei 125 Bucharest, Romania

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A finite automaton knows That counting takes fingers and toes, But, footless and handless, It tries, never endless, To follow five 1's with five 0's.