

COVER SHEET FOR PROPOSALS TO THE NATIONAL SCIENCE FOUNDATION

FOR CONSIDERATION BY NSF ORGANIZATIONAL UNIT (Indicate the most specific unit budget, i.e. program, division, etc.) Numeric and Symbolic Computation		PROGRAM ANNOUNCEMENT/SOLICITATION NO./CLOSING DATE	
SUBMITTING INSTITUTION CODE (If known)	FOR RENEWAL: ☒ CONTINUING AWARD ☐ ACCOMPLISHMENT BASED RENEWAL ☐ REQUEST. LIST PREVIOUS AWARD NO.: CCR-86-03674	IS THIS PROPOSAL BEING SUBMITTED TO ANOTHER FEDERAL AGENCY? Yes ☐ No ☒ IF YES, LIST ACRONYM(S)	
NAME OF SUBMITTING ORGANIZATION TO WHICH AWARD SHOULD BE MADE (INCLUDE BRANCH/CAMPUS/OTHER COMPONENTS) The Trustees of Columbia University in the City of New York			
ADDRESS OF ORGANIZATION (INCLUDE ZIP CODE) Box 20, Low Memorial Library New York, New York 10027			
IS SUBMITTING ORGANIZATION: ☐ For-Profit Organization; ☐ Small Business; ☐ Minority Business; ☐ Women-Owned Business			
TITLE OF PROPOSED PROJECT Average Case and Probabilistic Settings of Information-Based Complexity			
REQUESTED AMOUNT [REDACTED]	PROPOSED DURATION three (3) years	DESIRED STARTING DATE 07/01/89	
CHECK APPROPRIATE BOX(ES) IF THIS PROPOSAL INCLUDES ANY OF THE ITEMS LISTED BELOW:			
☐ Animal Welfare ☐ National Environmental Policy Act ☐ International Cooperative Activity ☐ Endangered Species ☐ Research Involving Recombinant DNA Molecules ☐ Research Opportunity Award ☐ Human Subjects ☐ Historical Sites ☐ Facilitation Award for Handicapped ☐ Marine Mammal Protection ☐ Interdisciplinary ☐ Proprietary and Privileged Information ☐ Pollution Control			
PI/PO DEPARTMENT Computer Science	PI/PO ORGANIZATION Columbia University in the City of New York		PI/PO PHONE NO. & ELECTRONIC MAIL Traub@CS.Columbia.edu (212) 854-2736
PI/PO NAME/TITLE J.F. Traub, Edwin Howard Armstrong Prof. & Chairman of C.S.	SOCIAL SECURITY NO.* [REDACTED]	HIGHEST DEGREE & YEAR PhD 1959	SIGNATURE
ADDITIONAL PI/PO (TYPED)			
ADDITIONAL PI/PO (TYPED)			
ADDITIONAL PI/PO (TYPED)			
ADDITIONAL PI/PO (TYPED)			
For NSF Use: 			
TO BE COMPLETED BY THE AUTHORIZED ORGANIZATIONAL REPRESENTATIVE. By signing and submitting this proposal, the prospective grantee is providing the certification set forth in Grants for Research and Education in Science and Engineering, NSF 85-57 (rev. 11/87).			
(If answering "yes" to either, please provide explanation.)			
Is the organization delinquent on any Federal debt?			
Is the organization presently delinquent, suspended, proposed for delinquency, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency?			
Chairman/Dean		SIGNATURE	DATE
NAME/TITLE (TYPED) Ralph J. Schwarz			(212) 854-...
Authorized Organizational Rep			
NAME/TITLE (TYPED)			(212) 854-489

* Submission of social security numbers is voluntary and will not affect the organization's eligibility for an award. However, they are an integral part of the NSF information system and must be provided with the proposal. SSN obtained under NSF Act of 1950, as amended.