

M I S C E L L A N E A

List of mathematicians and computer scientists of Romanian extraction	188
Obituaries	202, 210
From the bookshelves	203
17th A R A Congress	205
Authors of volume XII	209
Contents of volume XII	211

**MATHEMATICIANS AND COMPUTER SCIENTISTS OF ROMANIAN EXTRACTION
RESIDING OUTSIDE ROMANIA**

A

Flavian Abramovici
Department of Mathematics
Tel-Aviv University
RAMAT-AVIV, Israel

Sergiu Aizicovici
Department of Mathematics
Ohio University
ATHENS, OH 45701

Felix Albrecht
Department of Mathematics
University of Illinois
URBANA, IL 61801

Casius Alexandru
Vinetaplatz 2
1000 BERLIN 65
Germany

Titu Andreescu
1072 Thacker
DES PLAINES, IL 60016

Nicolae Anghel
Department of Mathematics
North Texas State University
DENTON, TX 76203

Mihaela Antonescu
Departement d'Informatique
Universite de Moncton
MONCTON, N.B. E1A 3E9
Canada

Marian Apostolache
402-15 Dellroy Avenue
KITCHENER, Ontario
Canada, N2A 2S2

Mircea Arcan
Tel-Aviv University
School of Engineering
69978 TEL-AVIV, Israel

Marian Aron
Department of Mathematics
Plymouth Polytechnic
PLYMOUTH DEVON, PL4 8AA
Great Britain

Dragu Atanasiu
Department of Mathematics
Chalmers University of Technology
GÖTEBORG, Sweden

Florin Avram
White Hall
Cornell University
ITHACA, NY 14853

B

Vasile Badea
596 rue Lavoie
STE. DOROTHEE, Laval, P.Q.
Canada, H7X 2P4

Evelina Baesu
105-40 62nd Road # 1P
FOREST HILLS, NY 11375

Malvina Baica
Department of Mathematics and
Computer Science
University of Wisconsin
WHITEWATER, WI 53190

Egon Balas
Graduate School of Industrial
Administration
Carnegie-Melon University
PITTSBURGH, PA 15213

Liana Barak
Department of Mathematics
Technion
HAIFA, Israel

Anca Barsanescu
26 rue Miolis
PARIS 15^e, France

Ilie Barza
Department of Mathematics
Lulea University of Technology
LULEA, Sweden

Ion Marin Belcea
Bell Communications Research
435 S. Street
MORRISTOWN, NJ 07960

Alexandra Bellow
 Department of Mathematics
 Northwestern University
 EVANSTON, IL 60201

Alecu Bencovski
 3757 Brookhaven Drive #464
 DALLAS, TX 75234

Hari Bercovici
 Department of Mathematics
 Indiana University
 BLOOMINGTON, IN 47405

Richard Blum
 Department of Mathematics
 University of Saskatchewan
 SASKATOON, S7N 0W0, Canada

M. V. Bodnarescu
 Baumbluete 4
 D-4300 ESSEN (1)
 Germany

Ciprian Borcea
 Rider College
 Lawrenceville Rd.
 LAWRENCEVILLE, NJ 08648

Georgeta Borcea
 Docentgatan 7A
 21452 MALMO, Sweden

Mihai Botez
 P. O. Box 1649
 OJAI, CA 93023

Andrei Breazna
 Department of Mathematics
 Louisiana State University
 BATON ROUGE, LA 70803

Aurora Breazna
 Department of Mathematics
 Louisiana State University
 BATON ROUGE, LA 70803

Virgil Brisca
 24-20 83rd St.
 EAST ELMHURST, NY 11370

Ion Christian Bruteanu
 39/19-25 Queen St.
 Newtown 2042
 SYDNEY, Australia

Florica Bucur
 c/o Alexandru Lascu
 Istituto di Matematica
 Universita degli Studi
 FERRARA, Italy

Ana Burghelea
 Department of Mathematics
 Ohio State University
 COLUMBUS, OH 43210

Dan Burghelea
 Department of Mathematics
 Ohio State University
 COLUMBUS, OH 43210

C

Eugene Calinescu
 79-23 71st Avenue
 GLENDALE, NY 11385

John Carstoiu
 44 Winslow Road
 BROOKLINE, MA 02146

Gheorghe Cernatescu
 449 Ingram Avenue
 STATEN ISLAND, NY 10314

Roxana Costinescu Chevreau
 Department of Mathematics
 Portland State University
 PORTLAND, OR 97207

Doina Cioranescu
 Laboratoire d'Analyse Numerique
 Universite de Paris VI
 4, Place Jussieu
 75230 PARIS Cedex 05

Ioana Cioranescu
 Department of Mathematics, Box BF
 University of Puerto Rico
 RIO PIEDRAS, Puerto Rico 00931

Dorin Ciomasu
Gartenstrasse 2
7332 EISLINGEN-FILS, Germany

Nina Ciomasu
Gartenstrasse 2
7332 EISLINGEN-FILS, Germany

Harry Cohn
Department of Statistics
University of Melbourne
PARKVILLE, Australia

Christian Constanda
Department of Mathematics
University of Strathclyde
26 Richmond Street
GLASGOW, G1 1XH, Scotland

Petre Constantin
Department of Mathematics
University of Chicago
CHICAGO, IL 60637

Gregory Constantine
Department of Mathematics
University of Pittsburgh
PITTSBURGH, PA 15260

Corneliu Constantinescu
Mathematisches Seminar
ETH - Zentrum
8092 ZURICH, Switzerland

Florin Constantinescu
Fachbereich Mathematik
Universitat Frankfurt
FRANKFURT/Main
West Germany

Constantin Corduneanu
Department of Mathematics
University of Texas at Arlington
ARLINGTON, TX 76019

Aurel Cornea
Fachbereich Mathematik
Katholische Universitat
8078 EICHSTATT, West Germany

Ovidiu & Rodica Costin
Department of Mathematics
Rutgers University
NEW BRUNSWICK, NJ 08903

Elena M. Croitoro
Department of Mathematics
University of Western Ontario
LONDON, Ontario N6A 587
Canada

Adolph Cusmariu
8000 Branch Wood Ct.
ELLCOTT CITY, MD 21043

D

Florin David
Department of Mathematics
University of North Carolina
CHAPEL HILL, NC 27599

Horace Dediu
230 North Street
TEWSBURY, MA 01875

Mihai Dediu
230 North Street
TEWSBURY, MA 01875

Sofia Dediu
1480 Rockway Avenue
LAKEWOOD, OH 44107

Aristide Deleanu
Department of Mathematics
Syracuse University
SYRACUSE, NY 13210

Emeric Deutsch
Department of Mathematics
Polytechnic Institute of New York
BROOKLYN, NY 11201

Radu Diaconescu
Department of Mathematics
Baruch College (CUNY)
17 Lexington Avenue
NEW YORK, NY 10010

Florin Diacu
Department of Mathematics
University of Victoria
VICTORIA, British Col. V8W 3P4
Canada

Nicolae Dinculeanu
 Department of Mathematics
 University of Florida
 GAINESVILLE, FL 32611

Irinel Dragan
 Department of Mathematics
 University of Texas at Arlington
 ARLINGTON, TX 76019

Christina Draghicescu
 Department of Mathematics
 University of Michigan
 Ann Arbor, MI 48109

Sorin Dragomir
 Università degli Studi Basilicata
 via N. Sautro 65
 POTENZA, Italy
 SUNY at
 Stonybrook, NY 11794

Andrei Duma
 Fachbereich Mathematik
 und Informatik
 Fernuniversität
 5800 HAGEN, West Germany

E

Elena Eftimiu
 Department of Mathematics
 University of Missouri
 8001 Nat. Bridge
 ST. LOUIS, MO 63121

Mordechai Epstein
 Department of Mathematics
 Tel-Aviv University
 RAMAT-AVIV, Tel-Aviv, Israel

Ivan Erdelyi
 Department of Mathematics
 Temple University
 PHILADELPHIA, PA 19112

Mihai Esanu
 57 A, rue Jean le Galleu
 esc. A, Apt. 3
 94200 IVRY SUR SEINE, France

F

John T. Fagarasan
 1020 W. Pecan Street
 BREA, CA 92621

Peter Farkas
 130 Sherman Street
 SANTA CRUZ, CA 95060

Ion Filotti
 40 ter, rue Fabert
 75007 PARIS, France

Ciprian Foias
 Department of Mathematics
 Indiana University
 BLOOMINGTON, IN 47405

Ingrid Fotino
 685 10th Street
 BOULDER, CO 80302

Sorana Froda
 Departement de Mathematiques
 et Statistique
 Universite de Montreal
 MONTREAL, P.Q.
 H3C 3J7 Canada

G

Nicholas Georgescu-Roegen
 2614 Hemingway Drive
 NASHVILLE, TN 37234

Costin Ghibu
 6225 Bienville
 BROSSARD, P.Q.
 J4Z 1W9 Canada

Michael Ghil
 Department of Atmospheric Science
 University of California
 LOS ANGELES, CA 90024

Dorin Ghisa
 Glendon College
 2275 Bayview Avenue
 TORONTO M4N 3M6 Canada

Virgil Gligor
 Department of Computer Sciences
 University of Maryland
 COLLEGE PARK, MD 20742

Eric Grinberg
 Temple University
 PHILADELPHIA, PA 19122

Silviu Guiasu
 Department of Mathematics
 York University
 DOWNSVIEW, Ontario
 M3J 1P3 Canada

H

Peter Hammer
 Center for Operation Research
 Rutgers University
 NEW BRUNSWICK, NJ 08093

Theodor Hangan
 Department de Mathematiques
 Universite de Haute Alpes
 MULHOUSE, France

Sergiu Hart
 Statistics Department
 School of Mathematical Sciences
 Tel-Aviv University
 69978 TEL-AVIV, Israel

Pia Horowitz
 Rh. Ben Eliezer 67/22
 52294 RAMAT-GAN, Israel

Ion Hrinca
 Department of Mathematics
 Ohio University
 ATHENS, OH 45701

I

Andrei Iacob
 Mathematical Reviews
 ANN ARBOR, MI 48107

G. D. Ianculescu
 17171 Roscoe Blvd. #250
 NORTHRIDGE, CA 91325

Constantin Ionescu
 477 West 132 Street #26
 HAWTHORNE, CA 90505

A. Ioinovici
 Department of Applied Mathematics
 Weizmann Institute of Science
 REHOVOT, Israel

Dan Ionescu
 170 Lees Ave #403
 OTTAWA, Ontario, Canada

Tudor Ionescu
 17 Oak Ridge Road
 SUDBURY, MA 01776

Andrei Jordan
 Mathématiques
 Université de Paris X
 NANTERRE, France

George Isac
 Department de Mathématiques
 College Militaire Royal
 SAINT JEAN, P.Q.
 JOJIRO Canada

Sorin Istrail
 Department of Mathematics
 Wesleyan University
 MIDDLETOWN, CT 06457

Vasile Ion Istratescu
 Westring 331
 2300 KIEL, Germany

Constantin Ivan
 Fachbereich 11
 Gesamthochschule Duisburg
 4100 DUISBURG, Germany

J

Dan Jurca
 Department of Mathematics
 California State University
 HAYWARD, CA 94542

K

Barbu C. Kestenband
200 S. Middle Neck Cl.
GREAT NECK, NY 11021
(N.Y. Institute of Technology)

Sergiu Klainerman
Department of Mathematics
Princeton University
PRINCETON, NJ 08544

Gabi Klarsfeld
59, rue d'Auteuil
75016 PARIS, France

L

Ioan D. Landau
Laboratoire d'Automatique
Institut National Polytechnique
GRENOBLE, France

Alexandru Lascu
Istituto di Matematica
Universita degli Studi
FERRARA, Italy

Aldo Lazar
School of Mathematical Sciences
University of Tel-Aviv
69978 TEL-AVIV, Israel

Marica Lewin
Leon Blum Str., Nr. 46, #30
33855 HAIFA, Israel

Otto Liess
Seminario Matematico
Universita degli Studi
PALERMO, Italia

Genevieve Lopata
31, rue de Coulanges
94370 SUCY EN BRIE, France

Lawrence Lupash
1401 S. Harbor Blvd.
LA HABRA, CA 90631

Liviu R. Lustman
NASA, LRC Mail Stop 409
HAMPTON, VA 23665

George Lusztig
Department of Mathematics
MIT Room 2-276
CAMBRIDGE, MA 02139

M

Matei Machedon
Department of mathematics
Princeton University
PRINCETON, NJ 08540

Monica Marcus
Weitzman Institute of Science
Clore House, Room 43
76100 REHOVOT, Israel

Dan C. Marinescu
Purdue University
WEST LAFAYETTE, IN 47907

Speranta M. Marcu
Department of Mathematics
University of Illinois
URBANA, IL 61801

Doru Marculescu
64 Tenterden Rd.
DAGENHAM, ESSEX
England

Dan Mateescu
Department of Mechanical Eng.
McGill University
MONTREAL, P.Q., Canada

Magda Mazilu
Hustarding 61
4630 BOCHUM, Germany

Petrisor Mazilu
Hustarding 61
4630 BOCHUM, Germany

David Mendel
Science Dept., Defence Ministry
P. O. Box 2250 (Dept.44)
31021 HAIFA, Israel

Preda Mihailescu
Seminar fur Angewandte Mathematik
ETH - Zentrum
8092 ZURICH, Switzerland

Tatiana Mihnea
16360 W. Mozart Avenue
LOS GATOS, CA 95030

Rita Mirodan
Hadiedaum Alley No. 4, Apt. 11
GILO, JERUSALEM, Israel

Ion Moga
Salzburgerstrasse 3/29
8225 TRAUNREUT
Germany

Sigrid Moga
Salzburgerstrasse 3/29
8225 TRAUNREUT
Germany

Marius Moiescu
Department of Mathematics
Brandeis University
WALTHAM, MA 02254

Elvira Moscovici
Department of Mathematics
Ohio State University
COLUMBUS, Ohio 43210

Henri Moscovici
Department of Mathematics
Ohio State University
COLUMBUS, Ohio 43210

N

Doru Nace
Dynamic Systems
105-29 63rd Road
FOREST HILLS, NY 11375

Adriana Nastase
Lehrgebiet Aerodynamik des Flugel
TH-Vermittlung 801
Templergrabe 55
5100 AACHEN, Germany

Nick Nazari
23104 Port Antonio
NIGUEL, CA 92677

Monica Neagoy
1121 Arlington Blvd #343
ARLINGTON, VA 22209

Constantin Negoita
Department of Computer Science
Hunter College (CUNY)
695 Park Avenue
NEW YORK, NY 10021

Marcel Nicolau
Department of Mathematics
Univ. Autonoma de Barcelona
08193 BELLATERRA, Espana

Liviu Nicolaescu
Department of Mathematics
Michigan State University
EAST LANSING, MI 48829

Lilly-Jeanne Nicolescu
Department of Mathématiques
Université de Reims
REIMS, France

Radu Nicolescu
Aigerstrasse 9a
5020 SALLZBURG, Austria

Monica Nicolau
Department of Mathematics
University of Illinois
URBANA, IL 61801

Valerian Nita
28857 James Street
WARREN, MI 48092

Viorel Nitica
Department of Mathematics
Penn State University
UNIVERSITY PARK, PA 16802-6401

Stefan Nuta
CAP-Sogeti Tertiaire
26, rue de la Pepiniere
75008 PARIS, France

O

Philip Obreanu
Department of Mathematics
Queen's University
KINGSTON, Ontario, Canada

Adrian Ocneanu
Department of Mathematics
Pennsylvania State University
UNIVERSITY PARK, PA 16802

John F. Oprea
Department of Mathematics
Cleveland State University
CLEVELAND, OHIO 44115

Charles M. Oprian
Department of Mathematics
Western Illinois University
MACOMB, IL 61455

P

Victor Pambuccian
Mountain House School
12, Lake Placid Club Drive
LAKE PLACID, NY 12946

Petru Papadopol
Department of Mathematics
Grand Canyon University
3300 W. Camelback Rd.
PHOENIX, AZ 85017

Ion Paraschivoiu
Departement de Mecanique
Ecole Polytechnique
MONTREAL, P.Q.
H3C 3A7, Canada

Dan Pascali
105-40 62nd Rd., #1P
FOREST HILLS, NY 11375

Larisa Patrascu (Bejenaru)
2126 Tree Lane
KINGWOOD, TX 77334

Cornel Pasnicu
Department of Mathematics
University of Puerto Rico
RIO PIEDRAS Puerto Rico 00931

Gabriel L. Pauliuc
University of Chicago
5734 University Avenue
CHICAGO, IL 60637

Monique Pavel
145 Avenue Malakoff
75116 PARIS, France

Nicolae Pavel
Department of Mathematics
Ohio University
ATHENS, OH 45701

Costel Peligrad
Department of Mathematics
University of Cincinnati
CINCINNATI, OH 45221

Magda Peligrad
Department of Statistics
University of Cincinnati
CINCINNATI, OH 45221

Laura Pieptea (Nicolaide)
2002 Fairmeadow Dr.
RICHARDSON, TX 75080

Valentin Poenaru
Mathématiques (425)
Université de Paris-Sud
91405 ORSAY Cedex France

Adolph Pollinger
Department of Mathematics
Israel Institute of Technology
HAIFA, Israel

Florin Pop
Department of Mathematics
Texas A & M University
COLLEGE-STATION, TX 77843

Horia Pop
Department of Mathematics
University of Southern California
LOS ANGELES, CA 90089

Cornelia Popa
2512 Adams Court #158
MICHELL, KY 41017

Sorin Popa

Department of Mathematics
University of California
-Los Angeles
LOS ANGELES, CA 90024

Ilie Popescu

Departement d'Informatique
Universite du Quebec à Hull
C.P. 1250, Succ. "B"
HULL P.Q. J8X 3X7, Canada

Liana Popescu

Inst. Univ. Technologie
Departement de Génie Electrique
Université de Poitiers
86034 POITIERS, France

Patrick Popescu-Pampu

1, rue de l'Equerre
CROISSANT-SUR-SEINE
78290, France
(Lycée Louis le Grand)

Radu Popescu

Departement de Mathematiques
Universite de Tours
37200 TOURS, France

Vasile Mihai Popov

Department of Mathematics
University of Florida
GAINESVILLE, FL 32611

Catalin Pora

407 N. Pennsylvania #604
INDIANAPOLIS, IN 46204

Florian Potra

Department of Mathematics
University of Iowa
IOWA CITY, IA 52242

Mircea Predeleanu

Laboratoire de Mécanique des
Solides
Ecole Polytechnique
91128 PALAISEAU, France

R

Alexandru Radu

Ponte de St. Julien 8
1227 CAROUGE, Switzerland

Dan Radulescu

16724 Yukon Ave #2
TORRANCE, CA 90504
Nicolas Radulesco

Le Victoria
13, Blvd Princesse Charlotte
MONTE CARLO, Monaco

Anca Luminita Ralescu

Department of Mathematics
University of Cincinnati
CINCINNATI, OH 45221

Dan Ralescu

Department of Mathematics
University of Cincinnati
CINCINNATI, OH 45221

Stefan Ralescu

Department of Management
Brown University
PROVIDENCE, RI 02912

Ion Ratiu

347 South Rd #G1
POUGHKEEPSIE, NY 12601

Tudor Ratiu

Department of Mathematics
University of California
SANTA CRUZ, CA 95064

John J. Rau

6432 Via Estrada
ANAHEIM, CA 92807

Nicholas Rau

Department of Economics
University College
LONDON, WC1E 6BT, England

Sandu Rautu

Ben Gurion University
84105 BER SHEVA, Israel

Corina Reischer
 Department of Mathematics
 University of Quebec
 TROIS-RIVIERES, C. P. 500
 G9A 5H7, Canada

Adrian Rezus
 Department of Computer Science
 Katholieke Universiteit
 6525 NIJMEGEN, The Netherlands

Moshe Roitman
 Department of Mathematics
 University of Haifa
 MT. CARMEL, Haifa Israel

Gruia Catalin Roman
 Department of Computer Science
 Washington University
 ST LOUIS, MO 63130

Mihail Romanos
 Department of Mathematics
 Cornell University
 ITHACA, NY 14853

Radu Rosca
 Avenue Emile Zola 59
 PARIS 15-e, France

Elemer Rosinger
 Department of Mathematics
 University of Pretoria
 PRETORIA 0002, South Africa

Eugen Roventa
 Computer Science Program
 Glendon College
 York University
 2275 Bayview Avenue
 TORONTO, Ontario., Canada

M. Rosenblatt-Roth
 School of Business
 Seton Hall University
 SOUTH ORANGE, NJ 07079

Radu Rosu
 Department of Mathematics
 Pennsylvania State University
 UNIVERSITY PARK, PA 16802

Theodor Rus
 Department of Computer Science
 University of Iowa
 IOWA CITY, Iowa 52242

S

Lila Santean-Kari
 Department of Mathematics
 University of Turku
 TURKU-50, Finland

Florin Sabac
 Department of Mathematics
 University of S. Carolina
 COLUMBIA, SC 29208

Erwin Schechter
 Konrad Adenauer Strasse 39
 D-6750 KAISERLAUTERN
 Germany

Micheline Schechter
 Konrad Adenauer Strasse 39
 D-6750 KAISERLAUTERN
 Germany

Ioana Schiopu-Kratina
 Business Survey Methods
 Statistics Canada
 Jean Talon Building
 OTTAWA, Ontario
 K1A 0T6, Canada

Dana Schlomiuk
 Department of Math. & Statistics
 University of Montreal
 MONTREAL, P.Q.
 H3C 3J7 Canada

Norbert Schlomiuk
 Department of Math. & Statistics
 University of Montreal
 MONTREAL, P.Q.
 H3C 3J7 Canada

J. Schoenheim
 Department of Mathematics
 Tel-Aviv University
 69978 TEL-AVIV, Israel

Vlad Sergiescu
U.E.R. Mathematiques
Universite de Lille - I
59655 VILLENEUVE-d'Ascq
France

Iftimie Simion
73-12 35 Ave. # C51
JACKSON HEIGHTS, NY 11372

Claudia-Lidia Simionescu-Badea
Klederinger Strasse 51
2320 SCHWECHAT, Austria

Dan Simovici
Department of Mathematics
University of Massachusetts
BOSTON, MA 02125

Mariana Slatineanu
21 South Oval
HAMILTON L8S 1P7 Canada

Florentin Smarandache
2124 W. Turney Ave
PHOENIX, AZ 85105

Dan Socolescu
Mathematisches Institut
Universitat Karlsruhe
D-75 KARLSRUHE, Germany

Rodica Socolescu
Mathematisches Institut
Universitat Karlsruhe
KARLSRUHE, Germany

Mircea Sofonea
Mathématiques
University Blaise Pascal
AUBIÈRE, France

Alexandru Solian
Department of Mathematics
University of North Carolina
CHARLOTTE, NC 28223

Liviu Solomon
Laboratoire de Mécanique Théorique
Universite de Poitiers
POITIERS, France

Sender Solomon
Michelangelo 10
TEL AVIV, 68029 Israel

Daniel F. Spulber
Department of Economics
Brown University
PROVIDENCE, RI 02912

Vasile Staicu
SISSA-ISAS
Strada Costiera 11
34014 TRIESTE, Italy

Anca Stanescu (Deliu)
Department of Mathematics
Georgia Institute of Technology
ATLANTA, GA 30332

Marius Stoka
Istituto Matematico
Universita degli Studi
TORINO, Italy

Ileana Streinu (Mrs. Borcea)
Department of Computer Science
Rutgers University
NEW BRUNSWICK, NJ 07102

Alex Suciuc
Department of Mathematics
Columbia University
NEW YORK, NY 10027

T

Dan Tataru
Department of Mathematics
Northwestern University
EVANSTON, IL 60201

Petre Tautu (M.D.)
Sonderforschungsbereich
Stochastische Modelle
Im Neuenheimer Feld 294
6900 HEIDELBERG, Germany

Constantin Teleman
Department of Mathematics
Harvard University
CAMBRIDGE, MA 02138

Nicolae Teleman
 Department of Mathematics
 SUNY at Stony Brook
 STONY BROOK, NY 11794

Silviu Teleman
 Department of Mathematics
 University of Puerto Rico
 RIO PIEDRAS, P.R. 00931

Florian Tent
 5041 N. Damen
 CHICAGO, IL 60625

Radu Theodorescu
 Department of Mathematics
 University of Laval
 QUEBEC, G1K 7P4

Nicolae Tipei
 1403 East 5th Street
 ROYAL OAK, MI 48067

Fabian Todor
 Ecole des Hautes Etudes
 Commerciales
 Universite de Montreal
 MONTREAL, P.Q.
 H3C 3J7 Canada

Imre Toth
 Lehrstuhl für Allgemeine
 Wissenschaftsgeschichte
 Universität
 Niederleierndorf
 REGENSBURG, Germany

Ioana Triandaf
 Naval Research Labs
 Code 4700.3
 4555 Overlook Ave S.W.
 Washington, D.C. 20375-5000

Victor Trutzer
 Department of Mathematics
 University of Massachusetts at
 Lowell
 LOWELL, MA 01854

Caius Ionescu Tulcea
 Department of Mathematics
 Northwestern University
 EVANSTON, IL 60201

Maria Christina Turcanu
 Department of Mathematics
 University of Toronto
 100 St. George St.
 TORONTO, Ontario Canada

Venera Turcu de Reyes
 Av. Paez c/c Monte Elena
 Edf. Atalaya, Piso 1, Ap. 8-C
 EL PARAISO, Caracas, Venezuela

Nicolae Tutos
 6 Wildwood Lane
 BURLINGTON, MA 01803

Lior Tzafriri
 Department of Mathematics
 Hebrew University
 JERUSALEM, Israel

U

C. Unguriano
 722 Newton Avenue
 MINNEAPOLIS, MN 55411

Sabetai Unguru
 Institute for History and
 Philosophy of Science
 Tel-Aviv University
 RAMAT-AVIV, 69978 Israel

V

Lucia Vaina
 Intelligent Systems Laboratory
 College of Engineering
 Boston University
 44 Cummington St.
 BOSTON, MA 02215

Izu Vaisman
 Department of Mathematics
 University of Haifa
 Mt. Carmel, HAIFA
 Israel

Eugene N. Vasilescu
 Department of Statistics
 Baruch College
 46 East 26th Street
 NEW YORK, NY 10010

Ileana Vasu
Department of Mathematics
Yale University
NEW HAVEN, CT 06520

Andrei Verona
Department of Mathematics
California State University
LOS ANGELES, CA 90032

Maria Elena Verona
Department of Mathematics
University of California
RIVERSIDE, CA 92521

Victor Vianu
Department Computer Sciences and
Engineering
University of California, San Diego
LA JOLLA, CA 92093

Marina Vidrascu
INRIA-Rocquencourt
Domaine de Voluceau
B. P. 105
7815 LE CHESNAY Cedex, France

Carmen Vlad
18 Midchester Avenue
WHITE PLAINS, NY 10606
(Pace Univ.)

Viorel Vlad
18 Midchester Ave
WHITE PLAINS, NY 10606

Dan Voiculescu
Department of Mathematics
University of California
BERKELEY, CA 94720

W

Jack Weinstein
SOFTTEL-Adv. Techn. Ltd
60 Medinat Ha Yehudim
P. O. Box 3112
46103 HERZELIYAH, Israel

Z

Dan Zacharia
Department of Mathematics
Syracuse University
SYRACUSE, NY 13244

Radu Zaharopol
Department of Mathematics
SUNY at Binghamton
BINGHAMTON, NY 13902

S. Zaidman
Departement de Mathematique et
Statistique
Universite de Montreal
MONTREAL, P.Q.
H3C 3J7 Canada

Dan Zamfir
Rehov Bar Kochba 1/2
TEL-AVIV, Israel

Irina Zamfir
Rehov Bar Kochba 1/2
TEL-AVIV, Israel

Maria Zamfir (Bleyberg)
Department of Computer Science
Kansas State University
MANHATTAN, KS 66506

Christina Zamfirescu
Department of Mathematics
Hunter College CUNY
695 Park Avenue
NEW YORK, NY 10021

Tudor Zamfirescu
Abteilung Mathematik
Universitat Dortmund
DORTMUND, Germany

Zoe Zorzor
Richard-Strauss-Strasse 13
8228 FREILASSING, Germany

Laszlo Zsido
Istituto de Matematica
Università di Roma 1
ROMA, Italy

The following colleagues have changed their affiliation/address or they have recently left Romania, and we do not have presently their exact coordinates:

USA: M. Breban, Josefina Bondoc, Carina Parvulescu, Alexandru Stanculescu, Mark Sturza, Deonisie Trifan, Sandu Crivineanu, Mircea Ghitá, Dan Constantin Radulescu

Australia: Christina Hartoceanu-Dobranis

Belgium: Radu Badesco

Canada: Stefan Olariu, Alexandru Pintilie, Melania Pintilie

France: Carmen Ieşan-Maftei

Germany: Stefan Sandor

Israel: Enric Goldgahen, Andrei Ney

ANNOUNCEMENT

The ARA Executive Council has received an invitation from the Moldavian Academy of Science and the University of Chisinau to hold its next annual Congress in Chisinau, Moldova (tentative dates July 12-17, 1993). A decision will be made soon in this regard.

O B I T U A R Y

c a i u s i a c o b (j a c o b)

1 9 1 2 - 1 9 9 2

CAIUS IACOB, Emeritus Professor of Bucharest University and a Member of the Romanian Academy of Science, passed away in the Spring of 1992 in Bucharest. He was the Honorary Director of the newly created Institute of Applied Mathematics of the Romanian Academy (see *Libertas Mathematica*, volume XI).

In the early 1930's, Caius Iacob went to Paris for obtaining his Ph.D. degree in Mathematics in France. Most Romanian mathematicians of his generation went usually to famous universities in Western Europe to obtain their higher degrees, this being almost a "sine qua non" condition for occupying a chair in a Romanian university. Caius Iacob obtained his ph.d. degree at the University of Paris, with the renowned Henri Villat as thesis supervisor.

Returned to Romania, Caius Iacob held various academic positions until he became a Professor of Mathematics at the University of Cluj in Transylvania. He then became Vice-President of that university, and a Corresponding Member of the Romanian Academy. In the 1950's Caius Iacob moved to Bucharest University, and for a long period he was the Chair of the Department of Theoretical Mechanics. He contributed significantly to the creation of new generations of researchers in Mechanics, particularly in Fluid Mechanics. He has been also a strong supporter of the Applied Mathematics in Romania, and the newly created institute with the Romanian Academy was in greatest part his project. Caius Iacob has been elected in 1960's a Member of the Romanian Academy, in recognition of his outstanding merits in research.

Among his publications we notice "Introducere matematica in mecanica fluidelor", Ed. Academiei, 1952. This book has been also translated in French. It did exert a strong influence among young researchers in Romania, in the field of Fluid Mechanics and its applications.

In 1989, Caius Iacob joined the democratic forces in Romania, and has been elected to the Senate in 1990.

FROM THE BOOKSHELVES

DIFFERENTIAL GEOMETRY in Honor of Radu Rosca. Editors: Franki Dillen and Leopold Verstraelen. Katholieke Universiteit Leuven, 1991, pp.205

This volume is dedicated to Radu Rosca for his contributions to the field of Differential Geometry, during the last half of a Century. Indeed, his first publication has appeared in 1939, in the Comptes Rendus de l'Academie des Sciences de Paris. Now, an octogenarian, Radu Rosca is active in the same field.

The first three papers included in the volume deal with various aspects of Rosca's life and research. They are authored by L. Verstraelen, K. Buchner and B. Rouxel. The remaining 13 papers are dedicated to various subjects in the field of modern Differential Geometry, and are authored by research mathematicians from Belgium, France, Germany and the United States of America.

A partial list of Rosca's publications includes almost 200 titles. The volume constitutes a well-deserved tribute to Radu Rosca's work and dedication.

Libertas Mathematica has published several papers by Radu Rosca and has also described his struggle for democracy in Romania.

SINGULARITIES OF THE N-BODY PROBLEM. An Introduction to Celestial Mechanics, by Florin N. Diacu. Centre de Recherches Mathematiques de l'Universite de Montreal, Canada, 1992, pp.175

From author's preface: "The motivations for writing this text are multiple. One is the enduring beauty of the remarkable proof of the almost century-old conjecture of Painleve, concerning the existence of noncollision singularities. Another is the desire to give an up-to-date presentation of an important, and often spectacular field of mathematics, connected with so many other branches of contemporary research. Following a survey of the history of the problem, we will see how topics of central importance in the last century have led to a modern, interesting and prolific source of problems, due to the work of many mathematicians who were able to apply new techniques and ideas related not only to Calculus, Function Theory and Dynamical Systems, but also to Algebraic Geometry, Morse Theory, Hamiltonian Systems, Lie Groups and Algebras, Global Analysis, KAM-theory and many others".

The volume is divided in 14 chapters and has a conspicuous list of references and an Index. The last chapter, the 14th, presents the solution of the N-body problem, recently obtained by Qiu-dong Wang (Celestial Mechanics, vol.50, 1991, 73-88).

The volume is a remarkable contribution of a young and very promising mathematician.

SELECTED PAPERS by Tadeusz Ważewski. Polish Scientific Publishers (PWN), Warszawa, 1990, pp. 572

This volume contains 47 papers published by Tadeusz Ważewski from 1923 until his death in 1972. These papers are mostly related to the theory of differential equations, a field in which Tadeusz Ważewski has made significant contributions. Only a few papers included in the volume relate to other fields, such as real variables or topology. Almost all papers are written in French, excepting two in Polish, one in German and another in English. Among the papers selected for inclusion in the volume one finds the celebrated paper "Sur un principe topologique de l'examen de l'allure asymptotique des integrales des equations differentielles ordinaires", which has exerted a strong influence in the applications of topological methods in the theory of differential equations, during the last 40 years.

The editorial committee for this volume has been formed by former students of Tadeusz Ważewski in Krakow, namely Czeslaw Olech, Andrzej Pelczar and Zofia Szmydt. A short biography of Tadeusz Ważewski by the editors opens the volume. Then a list of publications of Ważewski is included. This list contains 129 items, illustrating the variety of subjects that have been in Ważewski's attention during his career embracing 50 years. While most of the preoccupations were in the field of differential equations, including their applications to control theory, one can find also Ważewski's interest in such topics as "Une definition intuitive de la translation parallele au sens de Levi-Civita".

The volume illustrates profusely the contribution made by Tadeusz Ważewski to the theory of differential equations. It also shows the influence exerted by Ważewski on the younger generations of Polish mathematicians and the fact that he has created a school in the field of differential equations.

GEOMETRISCHE UND ALGEBRAISCHE METHODEN DER PHYSIK. SUPERMANNIGFALTIGKEITEN UND VIRASORO-ALGEBREN by Fl. Constantinescu and H.F. de Groote. Teubner, 1992, pp. 300

A MATHEMATICAL ANALYSIS OF BENDING OF PLATES WITH TRAVERSE SHEAR DEFORMATION by Christian Constanda. Pitman Research Notes in Mathematics # 215. Longman Sci. & John Wiley, 1990, VIII + 169 pp.

THE 17th ANNUAL MEETING OF THE AMERICAN ROMANIAN ACADEMY OF ARTS
AND SCIENCES HELD AT CSU ,NORTHRIDGE (June 3-7,1992)

The Seventeenth Annual Meeting (Congress) of ARA has been organized by Prof. Ileana Costea, with the Department of Industrial Engineering at California State University in Northridge, CA. For the first time in ARA's history, a significant number of participants came from Romania. Their participation was welcomed by Dr. Costea and the President of our Academy, Dr. Maria Manoliu-Manea.

Besides the usual sessions dedicated to various fields, 27 in number, there have been numerous other events related to Romanian culture. Among these special events we can mention one Art Exhibit, two Romanian Book Exhibits, Classical Romanian Music Concert, Bus Tour of Los Angeles, the Annual ARA Banquet. Several Round-tables have been organized during the Congress, dedicated to various aspects of cultural relations between Romania and the United States, Romania '92 and other.

As usual, we had two sessions dedicated to Mathematics and three sessions dedicated to Engineering and Computer Science. The following papers have been presented in the sessions dedicated to Mathematics: Florin Diacu (University of Victoria, Victoria, British Columbia, Canada), On the smoothness of regularization in Newtonian gravitational systems; Radu Zaharopol (State University of New York at Binghamton), Ergodic theory in vector lattices; Carmen Vlad (Pace University, New York), Remarks on countably compact lattices; Fabian Todor (Universite de Montreal, Canada), Sur une procedure de construction des statistiques suffisantes avec applications a une distribution de la famille de Darmais-Koopman; Horia Pop (University of Southern California at Los Angeles); Structure of arithmetic types; C. Corduneanu (University of Texas at Arlington), Theory of functional equations with abstract Volterra operators; Fl. Smarandache (Arizona S. University, Tempe, AZ), A numerical function in the congruence theory. Mr. Smarandache was late at the Congress but he had a chance to discuss with colleagues the topic of his paper. A few papers have been announced by participants from Romania but they have cancelled prior to the date of the Congress: Dan-Florin Dumitrescu (Institute of Applied Mathematics, Romanian Academy, Bucharest), A cubature formula for the bi-dimensional domain of a trapezoidal rule; Paula-Manuela Trandafir (Polytechnic Institute of Bucharest), Asymptotic study of a problem of singular perturbation.

The paper given by Dr. Florin Diacu is inserted in the present volume of Libertas Mathematica. The paper which Fl. Smarandache intended to present is also inserted in this volume. Abstracts of other mathematical papers are given here.

RADU ZAHAROPOL (Abstract)

An important direction of research in ergodic theory consists in the study of the various convergence properties of sequences formed with the iterates of a positive linear contraction T . The most commonly studied sequences are: The sequence of integral powers of T , (T^n) , $n=0,1,2,3,\dots$; The sequence of sums $(\sum_0^n T^i)$, $n \geq 0$; The sequence of averages $(n^{-1} \sum_0^{n-1} T^i)$, $n \geq 1$. The operator T is usually assumed to be a positive contraction of a space of classes of equivalence of measurable functions or a space of continuous functions. The paper deals with the case in which T is a positive linear operator on a vector lattice E (Riesz space). The main reason for investigating such a case is the fact that vector lattices are a natural setting for positive operators studied in ergodic theory. The results obtained extend and unify earlier theorems for function spaces. Due to the variety of vector lattices, the problems and results are gaining in complexity. Also, the ergodic theorems which hold or not for a certain type of Riesz spaces and operators offer relevant information about the structure of such spaces and operators. A main concern in our paper is to extend a theorem of E. Hopf to a class of Archimedean Riesz spaces. The notion of individual convergence we introduce in order to obtain the extension is more general than an earlier concept defined by Nakano. The notion of individual convergence is an extension of the almost everywhere convergence. A final topic is the extension of individual convergence to sequences not necessarily with positive elements of an Archimedean Riesz space.

CARMEN VLAD (Abstract)

This paper is concerned with relationships between countably compact, almost countably compact and normal lattices and with related measures.

Let X be an abstract set and \underline{L} a lattice of subsets of X , such that \emptyset belongs to \underline{L} . \underline{L} is called countably compact if for any countable collection $\{L_\alpha\}$ of sets in \underline{L} , their intersection being empty implies the existence of a finite subcollection with empty intersection. In what follows, $I(\underline{L})$ denotes the set of non-trivial zero-one valued measures on the algebra generated by \underline{L} , $A(\underline{L})$. By definition $\mu \in I(\underline{L})$ is \underline{L} -regular if for any $A \in A(\underline{L})$, $\mu(A) = \sup \{ \mu(B) \mid B \subset A, B \in \underline{L} \}$, and we denote the set of \underline{L} -regular measures by $I_R(\underline{L})$. We say that $\mu \in I(\underline{L})$ is σ -smooth on \underline{L} if for every sequence $\{L_n\}$ in \underline{L} such that $L_n \downarrow \emptyset$ we have $\mu(L_n) \rightarrow 0$ and we denote the set of all σ -smooth measures on \underline{L} by $I_\sigma(\underline{L})$. Note that if \underline{L} is countably compact then $I_R(\underline{L}) = I_\sigma(\underline{L})$.

By definition, \underline{L} is almost countably compact if $\mu \in I_R(\underline{L}')$ implies $\mu \in I_\sigma(\underline{L})$, where prime denotes the complementary set.

HORIA C. POP (Abstract)

A structure theorem in local number theory describe complete discrete valuation rings of equal characteristic as formal power series rings over the residual field. More generally the structure theorems of complete local noetherian rings (I.S.Cohen) describe such rings as homomorphic images of formal power series rings with coefficients in a field or a truncated Witt vectors ring - according to the fact that the original ring has the same characteristic as the residual field or not - and in later case equal to a power of the characteristic of the residual field.

We mention also the classical results on the structure of (noncommutative) finite dimensional algebras :Wedderburn Artin Theorem -An Artinian ring without radical is a direct sum of rings of matrices over division rings - and the Wedderburn Principal Theorem -A separable algebra is isomorphic to a direct sum of its residual algebra and its radical.

Tempted to extend the first mentioned result to noncommutative rings keeping in mind the theorems of Wedderburn we first have to define the twisted noncommutative polynomial rings over a semisimple ring A of coefficients associated to a twisting mapping $\phi : A \rightarrow M_n(A)$. The following rule describes how coefficients and noncommuting variables "commute": one can move a coefficient from the left to the right by using the twisting mapping ϕ

$$x_i a = \sum_j \phi_{ij}(a) x_j$$

This generalize the usual skew polynomial rings.

Now we have the following results in the equal characteristic case

STRUCTURE THEOREM : Let A be finitely generated over its center and such that the residual algebra is separable over the image of the center inside it. Then A is (a direct product of) homomorphic image of (truncated) noncommutative twisted polynomial rings with coefficients in a semisimple algebra (isomorphic to the residual algebra).

FINITENES THEOREM : There are finitely many twisting mapping for a given coefficient ring and a given number of variables.

In fact this will be a consequence of the following

EXTENSION OF THE NOETHER SKOLEM THEOREM : Let A be a semisimple algebra over a field k and B a separable algebra over k. Then the number of orbits of k-algebra homomorphisms from A to B under conjugation by automorphisms of B is finite. The same is true if k is a local henselian ring.

We can prove similar results in the unequal characteristic case (there exists a corresponding version of Wedderburn Principal Theorem proved by Azumaya). In that case the proofs are more elaborate and need a study of coefficient rings which are Witt vectors rings over a separable algebra. See details in [1],[2],[3].

- [1] H.C.Pop ,On the Structure of Artinian Rings,Comm.in Alg,15(11) 2327-48,(1987)
- [2] H.C.Pop ,Noncommutative p-adic rings and Witt vectors with coefficients in a separable algebra,J.P.A.A.,48 (1987),271-279
- [3] Florian Pop, H.C.Pop ,An Extension of the Noether Skolem Theorem.,J.P.A.A. 35, (1985)321-328.

FABIAN TODOR (Abstract)

Les applications de tests non-paramétriques sont de plus en plus répandues. Nous cherchons ici à améliorer la précision de ces tests basés sur le coefficient de concordance de Kendall. Par suite de travaux antérieurs de l'auteur, l'objectif de ce travail est de trouver la loi de probabilité de la variable $y = mkB^2$, où B est le coefficient généralisé de concordance de Kendall et aussi de calculer les statistiques suffisantes pour l'estimateur y^* , c'est-à-dire $y^* = mkB^2$. En encadrant les distributions trouvées dans la famille de Darmais-Koopman, nous avons envisagé les procédures numériques spécifique à cette famille. Dans le cas de volume de l'échantillon donné n_0 , nous donnons la procédure pour construire les statistiques suffisantes pour les paramètres y^* , en se servant de la méthode de Monte-Carlo dans le calcul numérique des intégrales.

CONSTANTIN CORDUNEANU (Abstract)

The theory of functional/functional differential equations with abstract Volterra operators has been initiated by Tonelli in the 1920's, developed by his students Cinquini and Graffi in the 1930's, and then reconsidered by Tychonoff by using some modern techniques. In the 1960's, Lucien Neustadt has contributed to this theory in obtaining new results and showing the connections of these equations with Control Theory. Also in the 1960's, R. Driver and A. D. Myshkis have brought significant contributions to the theory. An increasing number of researchers have been involved in this field during the last two decades. There seems to be more and more interest in the development of the theory of equations with abstract Volterra operators, partly because such equations appear in various applied research fields (Dynamics of populations, Dynamics of nuclear reactors, Continuum Mechanics).

The author presents a survey of the results obtained during the last few years in his research work, and in the work of his students Mehran Mahdavi and Yizeng Li. The presentation relates to the Cauchy problem for linear/nonlinear equations (both point data and functional data), variation of parameters formula, boundary value problems, higher order equations, global existence, admissibility, and other types of problems.

AUTHORS OF VOLUME XII

MIHAI BOTEZ is a Ph.D. graduate of Bucharest University. While in Romania (until 1988) he has been a Researcher with the institutes of the Romanian Academy. He specialized in social forecasting and has been active in this field for the last two decades. In Romania he became a dissenter of Ceausescu's regime, and serious efforts have been made to marginalize him. Presently, Mihai Botez is associated with the Woodrow Wilson Institute in California. See also vol. VIII of *Libertas Mathematica*.

CONSTANTIN CORDUNEANU (see Biographical sketch in *Libertas Mathematica*, vol. I)

FLORIN N. DIACU is a Professor of Mathematics at University of Victoria, Victoria, B.C. Canada. He is actively involved in Dynamical Systems Theory, with applications. See also vol. X of *Libertas Mathematica*.

SABER ELAYDI is currently a Professor of Mathematics with Trinity University in San Antonio, Texas. He is an active researcher in Differential Equations and related areas.

HANI REDA FARRAN is on the faculty of the Mathematics Department at Kuwait University, P.O.B. 5969, Kuwait.

ANDRZEJ KORZENIOWSKI is a Professor of Mathematics at the University of Texas at Arlington, Arlington, Texas. His main research interests are in Measure Theory, Probability Theory and Mathematical Physics.

DONAL O'REGAN is a Professor of Mathematics at the University College Galway (National University of Ireland). Professor O'Regan has the main research interest in DE.

DAN PASCALI (see *Libertas Mathematica*, vol. III)

Ch. PHILOS is a Professor of Mathematics at the University of Ioannina, Greece. See vol. IX of *Libertas Mathematica*.

MANUEL PINTO is a Professor of Mathematics with the University of Chile (Casilla 653, Santiago, Chile).

EUGEN ROVENTA (see volume VII of *Libertas Mathematica*).

FLORENTIN SMARANDACHE is currently a graduate student with the Arizona State University, Tempe, Arizona. See also volume XI of *Libertas Mathematica*.

CARMEN VLAD is a Professor of Mathematics with Pace University in New York City. See volume VII of *Libertas Mathematica* for a biographical sketch.

VIOREL VLAD (see volume XI of *Libertas Mathematica*).

W.B. VASANTHA KANDASAMY is on the faculty of the Department of Mathematics at the Indian Institute of Technology in Madras, Madras, 600005, India.

SAMUEL ZAIDMAN is a Professor of Mathematics at the University of Montreal, Montreal P.Q., Canada. He is known for his research work in Differential Equations and the Theory of Almost Periodic Functions. See volume III of Libertas Mathematica for a biographical sketch.

MARIA ZAMFIR BLEYBERG is currently a faculty member with the Department of Computer and Information Sciences at Kansas State University, Manhattan, Kansas. She graduated from Bucharest University and specialized in Algebra and Computer Science. The paper in this volume emphasizes the relationship in between Algebra and Computer Science.

IRINEL DRAGAN is a Professor of Mathematics at the University of Texas at Arlington, Arlington, Texas. For a biographical sketch, see Libertas Mathematica, volume II. His main interest is in Operations Research.

*
* * *

O B I T U A R I E S

I S R A E L B E R S T E I N passed away recently in Ithaca, New York, concluding his brilliant mathematical career which extended on four decades. He is a graduate of Bucharest University and passed his Ph.D. thesis with the late Simion Stoilow (one of the founder of topological methods in Complex Analysis). Israel Berstein served for almost three decades the Cornell University, Ithaca, N.Y., as a Professor of Mathematics. His research interests were mainly in Topology and Global Analysis. He has also contributed to other research fields, such as Differential Equations and Mathematical Analysis. He lectured in many universities in the USA and Europe, including Oxford University in England.

E L E N A W E X L E R - K R E I N D L E R passed away at the age of 61 in Paris, France. She was the spouse of Dinu Wexler who passed away three years ago (see Libertas Mathematica, volume IX). Elena Wexler-Kreindler was the daughter of Arthur K., a member of the Romanian Academy (Medical Sciences). She was naturalized a French Citizen in 1980, and held a position with the University Pierre and Marie Curie in Paris. She specialized in Algebra and published several papers in this field and attended Algebra Seminars organized by the University of Paris.