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Message from the President Comments on No-Show Authors

Our topic this time is what has become known as the 'no-show author' problem. This is an issue of professional ethics based on a set of complicated factors. Over the years I have developed a rather simplified approach to this issue which I would like to share with you.

It is particularly relevant as we approach the IFAC World Congress in 1996, but it is applicable to all IFAC meetings and, indeed, to all professional conferences. Let us begin with a definition: A 'no-show author' is one who satisfies the following three conditions:

- i. has a paper accepted at a conference
- ii. does not show up at the conference, and
- iii. does not inform the organizers that he/she will not show up.

I claim that such a 'no-show author' violates professional ethics and should be ostracized for such unacceptable behaviour. We all understand that there are occasions when the author of an accepted paper is unable to attend the conference in question. Moreover, there are situations in which governmental or other organizational constraints make it impossible for the author to know whether or not he/she will be allowed to attend until the last minute. In some countries this can be literally the night before the planned trip.

In most situations such unfortunate news arrives a few days or weeks before the planned trip. It is hard to blame the author in such cases, even though the impact on the conference will be negative.

What is entirely unacceptable is that the author fails to inform the conference organizers as soon as it is clear that the trip has been cancelled, even if that is the day before the paper is to be presented. It is this part of the author's behaviour that must be stopped. All authors have an absolute obligation to inform the organizers that their paper will not be presented

the moment they know that this will be the case. With some combination of e-mail, fax, telephone and postal communication available to all professionals throughout the world, there is simply no excuse for violating this ethical requirement.

'No-show authors' are unfair to conference attendees and to their colleagues in general. There are certain countries which are gaining a reputation for having 'no-show authors' regularly submitting papers to conferences. It is unfair that responsible authors from that same country might be discriminated against by conference organizers just because some of their colleagues are irresponsible. Of course it is unfair to organizers who have worked hard to assemble a conference program and to attendees who carefully plan their sessions attendance, if holes appear unexpectedly in the program. At least, with some prior notice, organizers can make last-minute changes and announce them to the attendees to minimize confusion and frustration during the meeting.

Conference organizers should be very clear about the requirement that prior notification must be provided in case a paper cannot be presented. Names of 'no-show authors' should be made available to future conference organizers and suitable sanctions arranged for such individuals.

It might be useful to publish a list of such authors as a guide to future conference organizers so that they may systematically exclude such authors and improve the chances that all papers accepted at a conference are actually presented as planned. I will encourage the IFAC96 Congress organizers to take strong measures to reduce the numbers of 'no-show authors'. I would be pleased to hear from anyone by email (S.KAHNE@IEEE.ORG) who would like to add to this discussion.

Stephen Kahne
IFAC President

To all our readers:

A Merry Christmas and a Happy New Year



Robot Control (SY.RO.CO.'94)

IFAC Symposium

Capri, Italy, 19 - 21 September, 1994

SY.RO.CO.'94 was held in Capri, Italy, September 19-21, 1994. This was the fourth of the IFAC series of triennial Symposia on Robot Control. The island of Capri is the jewel of the Bay of Naples. It is renowned for the beauty of its scenery and the variety of Mediterranean flora and fauna. Numerous archeological sites testify to the island's distant past. The Symposium site was the Palazzo dei Congressi located in the centre of Capri, an entirely pedestrian area. The environment constituted the ideal venue for stimulation and interchange of ideas among scientists.

The Symposium was co-sponsored by the IFAC Technical Committees on Manufacturing Technology (MANTECH) and on Computers (COMPUT), the Consiglio Nazionale delle Ricerche (CNR) Progetto Finalizzato Robotica, the IEEE Robotics and Automation Society, the International Federation for Information Processing (IFIP), the International Association for Mathematics and Computers in Simulation (IMACS), and the Robotics Society of Japan (RSJ).

There were 16 financial supporters from industry, universities and research organizations, whose generous grants significantly contributed to the realization of the event.

It was a very successful Symposium, both in terms of the quality of the Technical Program and in terms of the intensity of the Social Program. There were 185 registered participants and 65 registered accompanying persons.

The International Program Committee, chaired by Professor Salvatore Nicosia from the Università di Roma 'Tor Vergata' handled a record number of 225 submitted papers. Review reports were discussed during the IPC meeting held on 8 May, 1994 in San Diego, CA, in conjunction with the 1994 IEEE International Conference on Robotics and Automation. The final selection led to having 144 papers in the technical program. The program was split up into 36 sessions, with three respectively running in parallel. Thus, in the three days of the Symposium there were contributions from 321 researchers, representing 26 different countries.

The papers covered a range of topics relevant to the field of robot control, including modelling and identification, control design and implementation, motion and force control, learning control and

neural networks, sensor-based control, computational aspects, grasp control, multirobot systems, flexible manipulators, autonomous robots, nonholonomic robotic systems, space and underwater robotics.

In order to open wide perspectives to the participants, the technical program featured three plenary speakers preceding the technical sessions of the three days: Professor Suguru Arimoto from the University of Tokyo presented a lecture entitled 'State of the Art and Future Research Directions of Robot Control', Professor Oussama Khatib from Stanford University presented a lecture entitled 'Towards Integrated Robot Planning and Control', and Professor Gerhard Hirzinger from DLR presented a lecture entitled 'Space Robotics'.

In addition, two related events were scheduled: A Workshop on 'Programs and Perspectives for International Research in Robotics and Related Areas' organized by Professor Claudio Bonivento from the University of Bologna, and a Survey on 'Activities of the National Research Program on Robotics by CNR' delivered by Professor Umberto Cugini from the University of Parma.

All the accepted papers were collected in a three-volume set of Preprints, edited by L. Sciavicco, C. Bonivento and F. Nicolò. The Preprints were part of the registration and thus distributed to all participants. The presented papers will be published in the official Postprint Volume Series of IFAC Publications. They may be ordered by contacting

IFAC Publications
Elsevier Science Ltd
The Boulevard
Langford Lane
Kidlington
Oxford OX5 1GB
United Kingdom
FAX: +44/865/843845

To balance the technical side and to provide pleasant opportunities of interaction among participants and their most welcome accompanying persons, the National Organizing Committee, chaired by Professor Lorenzo Sciavicco from the Università di Napoli Federico II, put together a comprehensive Social Program for all the evenings of the Symposium.

Professor Bruno Siciliano

Distributed Computer Control Systems (DCCS'94)

IFAC Workshop

Toledo, Spain, 28 - 30 September, 1994

This Workshop was the 12th in a series which has gained wide recognition for its high quality standards. The series is currently sponsored by the Technical Committee on Distributed Computer Control Systems, which is chaired by Professor Ian MacLeod.

This year's meeting was held in the historic city of Toledo. It was attended by 62 delegates, coming from 19 different countries, who took a very active part in the Workshop, both with respect to the formally organized events and the informal exchanges during breaks and social events.

The International Program Committee selected 31 papers from a total of 58 submitted papers. All the papers were presented by the authors, and the subsequent discussions were active and fruitful. The presentations were organized into eight technical sessions:

- real-time communication architectures
- temporal properties of communication systems

- architectures for DCCS
- open and heterogeneous DCCS
- specification and design methods for DCCS
- systems issues
- performance issues
- applications

The tradeoffs between flexibility and deterministic behaviour in the design of distributed real-time systems was one of the key-points of the discussions, and also the subject of the panel discussion. Other highlights of the Workshop were the use of commercial software and hardware in DCCS, and methods and tools for specification and design of time-constrained distributed systems. In its entirety, the Workshop was a success and most of the delegates expressed their satisfaction.

Proceedings will be published by Elsevier Science Ltd (address as above).

Juan A. de la Puente
NOC Chairman

Robust Control Design

IFAC Symposium

Rio de Janeiro, Brazil

14 - 16 September, 1994

The IFAC Symposium on Robust Control Design, which was held in Rio de Janeiro, Brazil in September, was sponsored by the IFAC Technical Committee on Theory and was organized by the Sociedade Brasileira de Automática, the National Member Organization of IFAC.

The Symposium took place at the excellent Convention Centre of the Hotel Gloria, overlooking the beautiful Bay.

Besides the two Plenary (invited) Lectures, there were 16 technical sessions, at which 92 papers were scheduled to be presented, selected from a total of 135 submitted papers.

Among the highlights of the Symposium were the two excellent Plenary Lectures, the first one presented by Stephen Boyd from Stanford University ('Efficient Convex Optimization for Engineering Design'), a paper written together with two co-workers, and the second one by Robert E. Skelton from Purdue University ('Robust Control of Aerospace Systems'). Both lectures were brilliantly presented, stirring vivid discussions.

From the 92 accepted papers, 10 were not published in the Postprint Volume: Nine were not sent in the final form and one arrived too late.

78 people were registered, most of them from abroad, but fewer than 70 were actually present at the Symposium. 25 papers were not presented, 17 of which with no explanation before or after the Symposium. The relatively small number of participants and the large number of no-shows is to be explained by three reasons: The reputation of Rio de Janeiro as a dangerous city, the price of a round trip from the Northern hemisphere and (in case of researchers from the USA), the beginning of the academic year.

With respect to the first reason, many of the participants told me during and after the Symposium that the current bad reputation of Rio is to a large extent undeserved. In fact, they said that many cities in the 'first' world are more dangerous. In any case it was obvious that those who came were at ease and enjoying this city, which, by all accounts, is one of the most beautiful ones in the world.

Pedro M. Guimaraes Ferreira, IPC Chairman

Manoeuvring and Control of Marine Craft - MCMC'94

IFAC Conference

Southampton, UK, 7 - 9 September, 1994

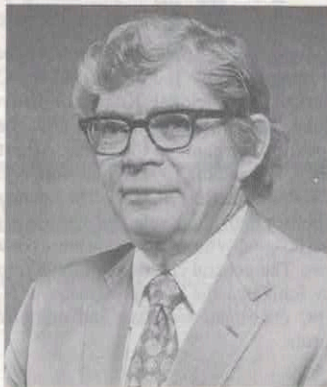
MCMC'94, the third bi-annual international conference on Manoeuvring and Control of Marine Craft, was held at the Warsash Campus of Southampton Institute. The conference was co-sponsored by IFAC and was organized in association with the IFAC Technical Committee on Marine Systems. The particular appeal of this conference is that it attracts contributions from practising control engineers, ship scientists, marine engineers and naval architects. Conferences in this series have quickly become established as important international meetings for the marine community providing a forum for a valuable dialogue between ship designers and control engineers.

The organizers produced an excellent, stimulating three-day program comprising 32 papers, covering a range of applications including novel and advanced control techniques for motion control of marine craft, hydrodynamic analysis, manoeuvring prediction, harbour operations, marine simulation and human factors, with papers presented by authors representing a total of sixteen countries. The conference theme was reinforced by the opening keynote address, entitled 'The Role of the IMO in Setting Manoeuvring Standards', which was delivered by Eur Ing Miguel Palomares, from the Safety Division of the International Maritime Organisation, London.

Dr. G.N. Roberts

TRANSITIONS

John Lozier 1912 - 1994



John (Jack) Lozier, the seventh President of IFAC, died on 15 August 1994 after several years of deteriorating health. He was born in Bayside, NY in 1912 and resided on the East Coast of the United States during much of his life. In 1934 he received his A.B. degree from Columbia University. Subsequently, he studied physics at Princeton University. This was during the time that Albert Einstein was active in physics there. During much of his life he was associated with the Bell Telephone Laboratories. He started at Bell Labs in 1936 and for five years was involved in transmission development work on radio and carrier telephone systems. During World War II his work was in the area of theory and design of servomechanisms with emphasis on homing missiles and torpedo guidance systems based on detection of propeller noise of a submarine. In January 1942 he was a circuit designer on a team working in that area of technology. The project was very intense and secret and successful. This work was, of course, done in the vacuum tube era and Jack's team designed a system which required 21 tubes that were to be dropped from an aircraft. By July 1942 the first drop was made and it destroyed its target. Sixty-one submarine sinkings were attributed to the Mark 24 Torpedo which used this system. Its use was of great importance in the war in the Atlantic.

After the war he did research and exploratory development both in transmission systems and in non-linear feedback control. He spent some time with the Shockley transistor development group working on temperature control systems for transistor crystal growing and zone-refining machines.

Mr. Lozier was responsible for a group engaged in research and consulting activities in guidance and control systems. His management skill blended with a very practical approach to the use of automatic control. He did much work in bang-bang control applied to navigation and communication systems.

He began his work on digital systems in 1952. He worked on the TRADIC and LEPRACHAUN digital computers and led a research program in digital feedback control systems.

For the TELSTAR communications satellite project, his group designed and built the control systems with which the horn antenna at Andover, Maine, USA automatically tracked TELSTAR and other communications satellites. For his work on TELSTAR, the French government made him

a 'Chevalier de la Légion d'Honneur Postale' in 1962. He held a number of patents and was the author of articles on transmission theory and control systems. He was co-author of a book 'Transistor Technology'.

In 1958 Mr. Lozier was a MacKay Visiting Professor in Electrical Engineering at the University of California, Berkeley. From 1962 to 1964 he was a member of the Technical Advisory Committee of the Board of Governors of the ARGONNE National Laboratories.

Mr. Lozier was a Fellow of the Institute of Electrical and Electronics Engineers and former Chairman of the Institute's Professional Group on Automatic Control (now the IEEE Control Systems Society). He was Past President of the American Automatic Control Council, the United States NMO of IFAC. Jack's commitment to IFAC spanned the entire history of our Federation. He attended the very first meeting of IFAC in Paris in 1957 with his wife Helen, who now survives him. In 1969 he was elected first Vice-President of IFAC and served from 1972 to 1975 as its President. The particular achievement for which he is remembered in IFAC was his controversial initiative to enlarge the number of IFAC Technical Committees from four to fourteen, a number which remained almost unchanged until 1993 when IFAC changed to 46 Technical Committees. In addition to his IFAC and IEEE responsibilities he served on the Technical Advisory Committee of the Argonne National Laboratory, and on the Editorial Boards of the 'International Journal of Control' and of 'Automatica'.

Jack was well liked by all and had an infectious sense of humour. He was an amateur poet. He frequently entertained his children and others with humorous readings of his poetry and narrations of short stories. He is remembered by his family for his particular skill at such reading.

IFAC will miss this leader who was so influential during its formative years.

Stephen Kahne

Vadim A. Trapeznikov 1896 - 1994



Academician Vadim A. Trapeznikov was part of the IFAC family from its very beginning. He played a great role in the history of the Federation, both in his function as member of the Executive Council from 1963-1969 and as Chairman of the Soviet- and later Russian National Committee of Automatic Control, the National Member Organization of IFAC in his country. From 1984 Academician Trapeznikov was also an Advisor of IFAC.

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Preview

Keynote Paper: Architectures for Integrating Manufacturing Activities and Enterprises (T.J. Williams, P. Bernus, J. Brosvic, D. Chen, G. Doumeings, L. Nemes, J.L. Nevins, B. Vallespir, J. Vlietstra and D. Zoetekouw)
Automation of a Laboratory Plant for Direct Casting of Thin Steel Strips (S. Bernhard, M. Enning and H. Rake)
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Hierarchical Intelligent Control with Flexible AC Transmission Systems Application (R.R. Zakrzewski, R.R. Mohler and W.J. Kolodziej)
Decentralized Preview Control for Multiple Disturbance Rejection in HVAC Systems (M. Zaheer-uddin, S.A.K. Al-Assadi and R.V. Patel)
Dynamic Model for a Bubbling Fluidized Bed Coal Combustor (E. Ikonen and U. Kortela)
A Self-Organizing Fuzzy Control of Weld Pool Size in GMA Welding Processes (K.S. Boo and H.S. Cho)
H ∞ Control of an Electromechanical Drive with Nonlinearities Using a Multi-Block Criterion (S. Font and G. Duc)
Autonomous Grasp Control of Link Mechanisms by Vibrating Potential Method (H. Yokai and Y. Kakazu)
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- H(infinity) Control of Railroad Vehicle Active Suspension (T. Hirata, S. Koizumi, R. Takahashi)
- Easily Testable Sufficient Conditions for the Robust Stability of Systems with Multilinear Parameter Dependence (B.D.O. Anderson, F. Kraus, M. Mansour, S. Dasgupta)
- A Method for the Auto-Calibration of PID Controllers (A. Voda, I.D. Landau)
- A Distribution and Iterative Method for Square Root Filtering in Space-Time Estimation (T.M. Chin, W.C. Carl, A.S. Willsky)
- A Case Study of Adaptive Nonlinear Regulation of Fed-Batch Biological Reactors (Libei Chen, G. Bastin, et al.)
- Experimental Results on Adaptive Nonlinear Control and Input Preshaping for Multi-Link Flexible Manipulators (F. Khorrami, S. Jain, A. Tzes)
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- A Counter Example for the Conjecture in 'An Algorithm for Interpolation with Units in H(infinity)' (V.V. Patel, K.B. Datta)

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- Design of Ride Control System for Surface Effect Ships Using Dissipative Control

- (A.J. Sorenson, O. Egeland)
- A Class of Subspace Model Identification Algorithms to Identify Periodically and Arbitrary Time-Varying Systems (Xiaode Yu, M. Verhaegen)

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- Robust Performance of Systems with Structured Uncertainties in State Space (K. Zhou, P.P. Khargonekar, et al.)
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- On the Discrete Generalized Lyapunov Equation (V.L. Syrmos, P. Misra, R. Aripirala)
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- Robust Feedback Synthesis for Margins at the Plant Input (O. Yaniv)

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- Screening Tools for Robust Control Structure Selection (M. Morari, J.H. Lee, R.D. Braatz, A. Packard)
- Stabilizing Controllers for Uncertain Symmetric Composite Systems (Guang-Hong Yang, Si-Ying Zhang)
- Controller Synthesis for a Class of Interval Plants (C. Abdallah, P. Dorato, F. Perez, D. Docampo)
- A Note on Lattices of Euclidean Subspace (T. Gaerts)
- A Remark on the Discretization of Singular Systems (A. Rachid)
- On the Bilinear Transformation of LQG-Balanced Realizations (L. Fortuna, G. Muscato, G. Nunnari)

Book Reviews

- Performance Modeling of Automated Manufacturing Systems, by N. Viswanadham, Y. Narahari (B. Egardt, N. Lennartson)
- The General Problem of the Stability of Motion, translated by A.T. Fuller (M.C. Smith)

Advances in Control Education (ACE '94) IFAC Symposium (3rd)

Tokyo, Japan
1 - 2 August, 1994

The Symposium on Advances in Control Education, again sponsored by the IFAC TC on Control Education, was held at Kogakuin University, Shinjuku, Tokyo. It was the third after the 1988 Symposium, organized by D.P. Atherton in Swansea, UK and the 1991 Symposium organized by M.J. Rabins in Boston, USA. The Japanese skill in smooth organization, splendid new ideas, as well as great hospitality turned the event into a remarkable success. The general chairman of the Symposium was A. Ichikawa, the NOC chairman was N. Suda, the IPC chairman, secretary and organizer was K. Furuta.

The Symposium was opened by a plenary lecture presented by M.J. Rabins: 'Control, Risk and Educational Responsibility: the Ethical/Professional Links'. After this, the following sessions, including three poster presentations, concentrated on teaching aids for control theory, computer aided education, control laboratory experiments, efficient ways to teach control theory, continuing education in industry, interaction between industry and university, international cooperation for control education.

In particular the following invited sessions should be mentioned: Teaching Control Theory (M. Mansour); How to Integrate Non-Technical Issues into Control Education (D. Brandt); Continuing Control Education in Industry (M. Masten); Control Engineering Solutions (P. Albertos). As done successfully in previous Symposia, again a software presentation and software exchange was organized by W. Schaufelberger.

A new invention was the video competition session which turned out to be a great success. 7 video tapes on laboratory experiments were shown. IPC members as jury decided on the best two videos. At the closing ceremony, the tape 'Application of Nonlinear Control Theory to Path Tracking Control of Articulated Vehicle' by M. Sampei, T. Kobayashi, Y. Tajima, N. Shibui was awarded the first prize. 'Multivariable Control of Magnetic Levitation System with Y-shape Iron Plate' by T. Fujii, T. Tsujino, K. Suematu, K. Sasaki, Y. Murata was chosen as a honorary mentioned contribution.

Some statistics: 133 delegates from 24 countries (including the President of IFAC and several Technical Board members), 17 sessions, 84 presented papers.

As already indicated, the presented papers were of excellent quality, the Symposium was perfectly organized and there was not a single item to be criticized. K. Furuta and his crew did a very good job. It was decided to carry on and to organize the ACE'97 in Istanbul, Turkey, in July 1997, chaired by A.T. Dinibütin, chairman of the Turkish NMO. It was also decided to repeat the TV tape competition at the 1996 IFAC World Congress in San Francisco.

K.H. Fasol
Chairman, TC on Education