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HISTORY and PEDAGOGY of MATHEMATICS
NEWSLETTER

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John Fauvel 21 July 1947 - 12 May 2001

Message from our Chairperson

In a sunny day of May we celebrated the funeral of John Fauvel. The ceremony took place in Leamington Spa (near Warwick University, UK). There were readings, speeches remembering John's aspects of life (private, academic, scientific), songs, music, flowers of the John's garden. Afterwards we went to the Saint Patrick Irish Club on the border of the river to continue our day remembering John. One of the walls of the room was covered with John's photos taken in various meetings and visits to colleagues.

Although we tried to be cheerful, as John had liked to see us, I perceived in the atmosphere a great sadness. With John disappears an important person who was able to make our community as a big family (this is what I feel), of which I'm glad to be a member. He also contributed to create an identity for the group of persons working in the field of history and pedagogy of mathematics.

In the same time in New Zealand a group of friends celebrated John. This gives an idea of how much he was known and loved all over the world. Also a lot of messages arrived to the special email address prepared in Warwick University. Myself, as present president of the group HPM, received a lot of messages. Some of them are in this special issue dedicated to John. Thanks to all of you.

I have written these lines without any revision by an expert of my poor English. Thus, if John can read them, he will recognize that these lines are really mine and come directly from my heart.

Fulvia Furinghetti
Universita` di Genova

Remembering John Grant Fauvel

I met John Fauvel the first time at the HIMED (History In Mathematics Education) Conference in Leicester (UK) in spring 1990. On this occasion he was launching in the ambit of the *British Society for the History of Mathematics* (BSHM) the tradition of this kind of conferences, in which historians of mathematics, mathematics educators, and teachers meet together to discuss how to cope with the teaching/learning problems using history of mathematics. The place of the conference was extremely evocative and stimulating: in Leicester there is *The Mathematical Association Library* with all the memories of this glorious association. The meeting was very successful and the room of the old building was not sufficient to contain all the participants. Being almost a beginner in the field

and coming from the mathematical environment I was very surprised to meet such a relaxed atmosphere in which there were scientific talks, workshops, but also movies and drama. For the first time I experienced the advantages and the pleasure of using different means of communication. There is a record of this conference in the journal *For the learning of mathematics* (number 2, volume 11, 1991). The opening paper ('Using history in mathematics education', 2-6) in this issue of the journal is a kind of *manifesto* of John's ideas about the use of history in mathematics teaching. This paper was for me (just starting in the field) a reference point in my successive works. What I liked particularly in this conference was the possibility to attend workshops and talks carried out by teachers on their actual experiments with history in classroom. This was my first inspiration to study the problem of the use of history in mathematics teaching through an "approach through examples": starting from the analysis of what is really happening in the classroom in order to interpret the needs of the teachers and to put these needs in relation with the possibilities offered by history.

The HIMED conferences became a tradition. Afterwards a one-day meeting was held annually, mainly addressed to a national audience and every two years the meeting lasted longer and gathered a more international audience. There has been a core of foreign participants to the international meeting: Evelyne Barbin and many delegates of the IREMs (Maryvonne Hallez, Anne Michel-Pajus,...) from France; Jan van Maanen, Marjolein Kool,... from The Netherlands; Torkil Heiede from Denmark and myself from Italy. Occasionally participants from Norway, Portugal, Sweden joined the meeting. There have been participants from the other continents; I remember Ubiratan d'Ambrosio from Brazil, Robert Mitchell, Fred Rickey and Frank Swetz from USA, Luis Moreno and Guillermina Waldegg from Mexico. With these meetings the community of researchers in the field of history and pedagogy of mathematics acquired a specific identity. Even more, due to the particular way John Fauvel was dealing with colleagues, the members of this community felt as belonging to a family, which became the European core of the *International Study Group on the Relations between History and Pedagogy of Mathematics*.

John Fauvel was chair of HPM (from 1992 to 1996), which is affiliated to the *International Commission on Mathematical Instruction* and in 1998 co-chaired the ICMI Study held in Luminy (Marseilles, France) "The role of the history of mathematics in the teaching and learning of mathematics" (see *ICMI Bulletin* 42, June 1997). The result of this big enterprise is a recent volume (J. Fauvel, & J. Van Maanen (editors), *History in*

mathematics education: the ICMI Study, Kluwer, Dordrecht-Boston-London, 2000). He contributed to the activities of the group HPM also as member of the scientific committee European summer University "History and epistemology in mathematics education" held in Montpellier (1993, France), in Braga (1996, Portugal) and Louvain-La-Neuve/Leuven (1999, Belgium).

From 1991 to 1994 John Fauvel was president of BSHM (*British Society for the History of Mathematics*). His involvement in this Society developed in different directions. He organised or co-organised 29 conferences for the BSHM, in particular the above mentioned HIMED and the September conferences on themes of the history of mathematics held alternatively in Cambridge and Oxford. I have participated to some of them and again I found the atmosphere very friendly, culturally stimulating, and collaborative. Among the themes touched by these conferences I would like to mention that of 1992 ('European mathematics 1848-1939') and that of 1994 ('Networks of communication in mathematics in the 19th and early 20th century'), which witness the idea underlying John's work that mathematics is part of the social life. As an important activity in the BSHM I like to quote the regular organisation of days devoted to the presentation of research in progress carried out by young scholars in the history of mathematics.

One of the main tasks he afforded in his period of presidency of BSHM was editing the newsletter of the Society (since 1995). It is widely recognised that this it is the best Newsletter for any organisation I know. To read it is a pleasure for the eyes and the mind. The BSHM newsletter is a clear expression of the way of working of John Fauvel: attention for the cultural and informative side, but also great attention to details, the visual/aesthetic side. He was an effective communicator and I learnt from him the importance of using different means (words, pictures, movies, ancient drawings) to transmit ideas and emotions. Through the pages of the BSHM newsletter he fought to preserve the grave of J. J. Sylvester from destruction and blamed the sale of the Turner collection by Keele University.

John Fauvel was also on the editorial board of a number of journals, including *For the learning of mathematics*, *Science and education*, *Themes in education*, *Paradigm*, *Radical philosophy*. He has been in the executive committee of the International Commission on the History of Mathematics.

As a present chair of HPM group I have received a lot of messages all over the world, expressing the sadness for having lost both a friend and a person

so present in promoting history of mathematics and mathematics itself in school and society. I like to remember an aspect of his personality that is evidenced by the structure of the works during the meeting of ICMI Study in Luminy and the related book: the idea of democracy in culture. During the ICMI meeting all the participants had the opportunity to express their ideas that are recorded in the book. So the book contains a plurality of voices and is a unique fresco of opinions and experiences.

He was a man with many interests (social, cultural, and affective). He played violin, recorder, pianola and clavichord. He edited cookery books; at the end of conferences he often asked my opinion about the food served (as an Italian it is assumed that I am competent in this field). He liked gardening. He liked to take photographs of us during the conferences. These photos appeared in reports and proceedings of meetings signifying that behind ideas and work there are persons. He has been for me (as for many other researchers in history or education) an important cultural reference, a source of advises and encouragement. I learnt from him a lot of things. It has been a pleasure to have met him.

Fulvia Furinghetti
Universita` di Genova

John Fauvel - a curriculum vitae

John Fauvel was born on 21st July 1947, in Glasgow. After attending school at Trinity College, Glenalmond, he obtained a BA in Mathematics at Essex University in 1970 (including a dissertation on *Homotopy Theory*), an MSc at Warwick University in 1973 (with a dissertation on *Algebraic K-Theory*), and an MPhil in Mathematics at Warwick University in 1977 (with a dissertation on *Fuzzy Theory*).

He was a Research Assistant with Glaxo Research Ltd. (1966 and 1967), a Tutor in Mathematics at Warwick University in 1970-73, had visiting appointments in the History of Science, Art and Astronomy at Birmingham Polytechnic (1975-78) and Wolverhampton Polytechnic (1977). He started working for the OU in 1974 as an Associate Lecturer. Following temporary Lectureships in the Institute for Educational Technology (1975) and Staff Tutor posts in the Arts Faculty and Mathematics Faculty (now the Mathematics and Computing Faculty) in 1975-78, he joined the Mathematics Faculty in 1979 as *Lecturer in Mathematics with Special Responsibility for the U-area*.

He served on the Course Teams for A381, *Science and belief: from Darwin to Einstein*, AM289, *History of mathematics*, U202, *Inquiry*, MA290, *Topics in the history of mathematics*, and more recently on the *Mathematics entry suite* (particularly MU120, *Open mathematics*). He was an organiser and presenter of a number of programmes in a radio series *Mathematics Miscellany* in the 1990s.

In 1998 he was the New Zealand Mathematical Society's Visiting Lecturer for 1998; in 1999 he gave an MAA invited lecture, on the subject of 'The history of mathematics and its future', at the Joint Mathematical Meetings of the MAA and AMS, Baltimore, USA, and was a Fulbright Scholar and visiting professor of mathematics at Colorado College, Colorado Springs, USA; and in March 2000 was Huffman Scholar in Residence at Miami University, Oxford, Ohio, USA.

The History of Mathematics Research group at the Open University is one of the largest and most active in the world. Its members (June Barrow-Green, John Fauvel, Jeremy Gray and Robin Wilson) work on a number of overlapping areas. John's recent research reached back into the 17th Century for his study of Newton's mathematical language, a pioneering study of mathematics, language and symbolism in the work of Isaac Newton. He had recently co-edited (with Robin Wilson) a book *Oxford figures: 800 years of mathematical science*, to which he had contributed 3 chapters, on *800 years of mathematics traditions*, *Georgian Oxford* and *James Joseph Sylvester*. Recently his PhD student Jackie Stedall completed her thesis on *The algebra of John Wallis*, and was awarded a prestigious Leverhulme Research Fellowship.

John was involved in the social history of mathematics in the UK, and in the relations between history of mathematics and mathematics education. He was particularly interested in British mathematical developments of the sixteenth to seventeenth centuries. He believed strongly in the benefits of research in the history of mathematics for the teaching of the subject. From 1994 to 1998 John was a member of the executive committee of the International Commission on the History of Mathematics.

He was president of the British Society for the History of Mathematics from 1991-1994, and had edited its Newsletter since 1995. He organised or co-organised 29 conferences for the BSHM since 1990, notably several of the annual HIMED (History in Mathematics Education) meetings and several of the RiP (Research in Progress) meetings for research students to meet and discuss their

work. Among the campaigns he was prominent in on behalf of the BSHM were the campaign to prevent the destruction of the grave of J. J. Sylvester and its conversion into a north London car-park, and the campaign of protest against the University of Keele's 'secret disposal' of the famous Turner Collection of historical mathematical texts to a second-hand book-seller.

John was chair of HPM (the International Study Group on the Relations between History and Pedagogy of Mathematics, affiliated to the International Commission on Mathematics Instruction) from 1992 to 1996, co-organised several of its international conferences, and co-chaired the ICMI Study on *The role of the history of mathematics in the teaching and learning of mathematics*, which was recently published as *History in the mathematics classroom* by Kluwer 2000.

John was also on the editorial board of a number of journals in the area of mathematics, education, history and cultural studies, including *Science and Education*, *For the Learning of Mathematics*, *Themes*, *Paradigm* and *Radical Philosophy*.

He enjoyed cooking, and edited *Simple Scoff: a Cookbook* in 1972; he also indexed a companion volume *Seasonal Scoff* in 1977. At Essex University he was President of the Music Society, Chairman of the Subscription Concerts Committee, and founding President of the Mathematics Society. He played the violin, recorder, pianola and clavichord.

David Brannan

John Fauvel - an obituary

John Fauvel, who has died at the age of 53, was one of the Open University's great teachers. By his talent, intelligence, and selfless modesty, he made a major contribution to the revival of interest and development of resources in the history of mathematics, not just in the United Kingdom but internationally.

He was a person of great sensitivity, with a rare ability to know how students would respond, so that in his hands teaching at a distance became much more of a conversation. This gift was particularly well displayed in the current course on the history of mathematics, which has become the benchmark across the country. John's great innovation in that course was to break with a long tradition of loading students up with well-attested facts and to engage them directly in the business of

becoming an historian. Right from the start students are asked to reflect on what they are doing as fledgling historians, and while doing so they are helped to read a variety of sources in the same sensitive way that John had. Research historians regularly urge a fresh reading of texts that is alert to what they actually say, and not to what they are popularly supposed to say. That was always John's way, and he successfully pioneered the high-level teaching of the history of mathematics in that spirit.

John also edited five books which are among the most instructive and enjoyable in the subject (one even made it to the ill-fated Dome). They display his sensitivity to texts, which he could open up and make speak again, as well as to pictures, for which he had a fine eye. He combined a gentleness of spirit with a forthright defence in matters of principle, most recently seen in his hard-hitting, analytic and beautifully argued writings castigating the action of Keele University for the way they disposed of the Turner collection of rare mathematical texts. Indeed, one of the most remarkable aspects of John was that there was no gap between what he was and how he thought and taught. He was a remarkably whole person, and very much his own person, capable of creating so much that was original because it was in him and of him.

His work for the British Society for the History of Mathematics, of which he was President from 1991 to 1994, is most visible in their wide-ranging, erudite, and attractive Newsletter, which has created a remarkable sense, not only of community but of family for the scattered members of that international group. He brought many young students into the Society, and helped it to be active in the campaign to prevent the destruction of the grave of the 19th Century Jewish mathematician J. J. Sylvester, which might otherwise have been turned into a north London car-park.

John enjoyed many signs of growing recognition in the last decade. He was chair of the International Study Group on the Relations between History and Pedagogy of Mathematics, which is affiliated to the International Commission on Mathematics Instruction (ICMI) from 1992 to 1996 and last year co-chaired an important ICMI Study. In 1998 he was the New Zealand Mathematical Society's Visiting Lecturer for 1998; and he was regularly invited to speak at major conferences in the United States.

John went to school at Trinity College, Glenalmond, Scotland. He gained a BA in Mathematics from Essex University in 1970 and an MSc and an MPhil from Warwick University in 1973 and 1977. He started working for the Open

University in 1974, and became a lecturer there in 1979, and in due course a Senior Lecturer.

Alongside his commitment to mathematics and teaching John had wide learning in many disciplines and a lively interest in the worlds of the arts, thought, ideas and public life. As an openly gay man he lived his life positively and joyously, with great good humour and a fine sense of style. He expected and received the same generous tolerance of his lifestyle which he extended to all who lived differently. His society was an inclusive church which loved the diversity of man- and womankind. He was outraged by hypocrisy and campaigned energetically against laws, persons, and practices responsible for injustice, bringing to bear the same sharp intelligence that characterised his academic work.

John died in the house of one of his closest friends on a glorious summer day that had become a true celebration of his too short life. He was loved, befriended, respected, and admired by people all over the world. He died quickly of a dysfunctional liver and kidney, arising from a condition he had had for the last 10 years, and although he had recently been put on the list for a liver transplant, his own deteriorated more quickly than anticipated, making the operation impossible.

He leaves cousins Sandy and Ian Blair, beloved godchildren Sophie Blair and Henry Britton, and a multitude of dear friends from every walk of life. In the words of in the Kandor and Ebb song, he felt that 'life is a cabaret, old chum, come to the cabaret'.

Jeremy Gray
Open University

John Fauvel - a tribute

Tribute to John Fauvel, on behalf of the international community of those interested in the History and Pedagogy of Mathematics, spoken at John's funeral 23rd May 2001, on a beautiful sunny day at Oakley Wood (Warwickshire)

Good people, [Sometimes John would start an address like this. I think that this beginning expressed that he liked the audience and that he wanted to say some important things to it] When remembering and celebrating the life of our dear, dear John Fauvel, we are in deep grief and mourning, and in great joy at the same moment. Although it is difficult for me I want --here with you-- to stress the joy. The joy

- that we have known John,
- that we have worked with John,
- that we have laughed with John,

- that John came to visit us, wherever we were on the globe,
- that John inspired us, loved us,
- that he cooked for us, and that he has written such bright and beautiful history for the world and for us.

When I say “we” I am happy that it is truly “we”, that I speak for many colleagues and friends of John's, all over the world, who have expressed to me their feelings and memories about John. In alphabetic order of the countries these messages came from Argentina from Vicky, Australia from Gail, Belgium from Maggy, Brazil from Sergio and Ubiratan, Canada from Anna and Glen, Denmark from Mogens, France from Annie and Jean-Luc, Germany from Niels, Greece from Costas, Hong Kong from Fung-Kit and Man-Keung, Israel from Abraham, Italy from Fulvia, who is present here as the Chair of the HPM studygroup, and from Giorgio, Guido, Mariolina and Lucia, Japan from Ryosuke and Masami, the Netherlands from Barbara, Danny, Ed, Iris, Klaske, Marjolein and Mattheke, New Zealand from Coralie and Geoff, Norway from Maria Luiza and Otto, Poland from Ewa, Portugal from Eduardo, Spain from Miguel, Switzerland from Daniel, the United Kingdom from Antonio, Chris, Costel, David, David, Helen, Ivor, Jackie, June, Lesley, Neil, Peter, Peter and Steve, the United States of America from Bob, Florrie, Karen D and Victor, Taiwan from Wann-Sheng.

John was a global person. He travelled and lectured around the world, and he is remembered around the world. I read greetings from New Zealand, from Coralie Daniel and Geoff Layton. With Geoff, John and Alfreda lived in the same house when John and Geoff were students. “Geoff wanted us to be at his house at Doctor's Point (partly because of its ellipsoid design and shape). We will be there from 8p.m. (our time - 7a.m. GMT) and at least some of us will wait till after midnight. We would like you to mention our gathering here, when you speak; it seems fitting seeing that John was so keen to understand things in global ways, both as a scholar and as a traveller.” [Coralie Daniel, 16 May]

John was our colleague and coach, working for the benefit of people, for young colleagues, for learners with special needs. History of mathematics for him was a means to empower people. Several colleagues wrote to me about the great support John has always been for them. I read some lines from Man-Keung Siu in Hong Kong.

“I got acquainted with John in the summer of 1988 at Kristiansand, the same occasion when I got to know most of you in the HPM group. We all become good friends ever since. Like all others, John had been very kind and helpful to me, who

for the first time joined in this HPM group. It confirms my belief that a regard for the history of mathematics can generate in one a warm and humane attitude that will show up not just in the intellectual commitment in the discipline but also in other aspects. Throughout these 13 years that I know him, he had always been so supportive in what I do and we can talk on almost anything. I will miss him very very much, along with many others.” [Man-Keung Siu, 15 May]

John was always helpful with gentle criticism, with a gentle push, with references to sources, always sending xeroxes of material that he thought was interesting for you, always disclosing the publications of others through his abstracts. John gave chances to colleagues at the start of their careers, by inviting them for lectures and by bringing them together. I strongly felt this myself, when in 1990 John gently pushed and persuaded me to give a lecture and a workshop at the first History in Mathematics Education (HIMED) Conference in Leicester. “Of course you can do this,” he said. And when I was in doubt about my ability to speak the language well enough, he said: “And what are we speaking now?” “English,” was my reply. “Precisely”, he reacted, “you can also speak English in a lecture room.” John was a source of culture, of ideas and concepts, of knowledge and of good questions. I read a line from Niels Jahnke from Germany:

“I met him at some conferences and can only agree to what you say about his unselfish way of helping others. Besides, I admired him for being one of the most cultivated persons I have ever met.” [Niels Jahnke, 15 May]

John's rich experience in many fields impressed all of us. Karen D wrote of how John, in a lecture, displayed a knowledge of American history which was amazing even for the Americans themselves. Always there were unexpected things. I think of John, standing in our garden in Groningen, telling apart the four classical roses that we have, each by its own name. “Oh gosh, you have a Lady Fletcher”, he said (the Lady being one of the roses; to be honest, I have forgotten the precise name, it could have been another Lady so-and-so). It was wonderful to work with John, as I experienced again when we edited the ICMI Study *History in Mathematics Education*. Many ideas, phrasings, pictures, and main lines came from John. John was a wonderful friend, always interested in the other person. It was a delight to have supper at his place, although I never understood how anything edible could come out of his kitchen. I shall end with one story of my own, and a feeling which is shared by almost everyone who wrote to me these days.

The story is about John's glasses. He was proud of the special design of his glasses, and I was too,

since most of them came from Groningen, where I live. The first time John visited me, we had arranged that I would collect him from the railway station. At the time of the rendezvous, no John came out of the train. I decided to wait a bit more: maybe there would be a message, maybe he would be in the next train. And then I heard "Oh, hello Jan, is that you?". A shortsighted John had found me. What had happened: John had found out that Groningen had a reputed sauna, so he had arrived many trains earlier and had been to the sauna first. But there he had managed to stand on his glasses and break them. So, the first thing we did together in Groningen was to buy new glasses for John. He was so happy with them, since it was the type of design --he said-- he had never seen in the UK. The feeling I want to end with is the feeling of resonance. Sometimes it happens that someone says something that starts to resound within you. It was my question at the end of John's lecture, 14 April 1987 in Amsterdam, about *British Mathematics before Newton*, which tremendously resounded within John that started our contact. Victor Katz beautifully expresses this feeling too when he writes about John:

"And I will never forget when we were on the same program at an AMS meeting a few years ago. He was right before me on the program and was talking about Sylvester's life in Baltimore. He concluded by reading a very flowery introduction that Sylvester had used in a speech - and he changed it in such a way that he in fact was introducing me. I was very touched by it all - noone had ever introduced me in quite that way before." [Victor Katz, 15 May]

"I was very touched by it all": that is precisely how John was. And finally our young scholar Masami Isoda from Japan. John and I are very fond of his work and of him as a person. Masami wrote:

"This year, I am reading *The History of Mathematics* and *History in Mathematics Education* with my students. I want to tell his warm hart to them and others." [Masami Isoda, 14 May]

John's spirit will continue to live through his writings and through us. Thank you, dear friend, good man.

Jan van Maanen
Groningen

John Fauvel - messages

Many messages about John Fauvel can be found on the website celebrating his life at www.dcs.warwick.ac.uk/bshm/Fauvel.html Some are reproduced here. Read and rejoice!

Dear all, Florrie called me on Saturday afternoon, just a couple of hours after John's death. I was shocked and greatly saddened at the news. I got to know John in 1988 at the meeting in Norway organised by Otto Bekken. Since that time, I have seen him frequently - both at meetings and at my home - and have corresponded with him regularly. We had a particularly good working relationship when I was editing the HPM Newsletter and he was the International Chair of HPM. Every issue he sent me something to include - and he was always on the lookout to increase the mailing list and spread the word about the use of history in the teaching of mathematics. Last summer he came to Washington and gave a week's worth of lectures to the high school teachers (and a few college teachers) participating in the Historical Modules project organised by Karen Michalowicz and myself. He did such a wonderful job for that audience; all of the teachers will remember him for years to come and they are all saddened by his death. At the end of that week, he came to my house for brunch - and that was the last time I was destined to see him. I was supposed to see him in New Orleans at the January meeting of the AMS, but I was unfortunately unable to come. And, as usual, he organised a postcard to me signed by a lot of people just to show that I was missed. I was looking forward to working with him on the United States Open University - where I am now an advisor. In that capacity, I finally got the chance to read through the entire OU course on the History of Mathematics. It is really a fantastic piece of work, extremely well written and accessible to people whose mathematics backgrounds are not the strongest. I was also looking forward to seeing him in England next year, since my son will be studying there. I will miss John very much. It is up to all of us to continue his work.

Victor Katz

Dear Colleagues: John's death caught me by complete surprise, I had no idea he was so ill. It is certainly a great loss to the small community of HPM'ers, but also to mathematics education at large. Looking backwards, one can find some consolation in that the ICME book he edited with Jan is out and he could savour such a big accomplishment. May his personality inspire us not only professionally but also alas as human beings.

Abraham Arcavi

Dear friends, I feel the need to contact friends and colleagues of John all over the world. Unfortunately, I soon realised that it was impossible for me to find words to express my feelings about John's personality and the deep sorrow that his untimely death has caused to me. Please, consider this short message as an effort to share my feelings about this tragic event with some friends who came to know John and have certainly

realised his quality of the highest rank, both as a scientist and as a man. I also apologise for my poor English that are certainly not enough to convey my feelings. When I learned about this tragic event, I had already prepared a letter to John together with a copy of the proceedings of the *Colloquium on the Didactics of Mathematics* of which I was the organiser last year in Crete, and in which John was an invited speaker together with others. The proceedings contain his thoughtful talk about history of mathematics as a resource for the mathematics teacher. Perhaps it is the most recent (alas, the last) of his works that has been published while he was still alive. I decided to mail it in the form I had already prepared, with the letter sent personally to him, as if he were still alive. I felt that he is indeed alive in the heart of all those people everywhere in the world who were lucky enough to meet him and presumably work with him. I consider myself as one among them. At this moment this fact encourages me to try harder in the direction in which he, himself, has been living and working so unselfishly, unfortunately without his friendly presence and advice to help me. Kind regards,

Costas Tzanakis

In Memory of John Fauvel It is not frequently the case --- but you will definitely have to count it a blessing if that ever happens --- when you first get acquainted with somebody you immediately feel really at ease with the person and can carry on a conversation which goes far beyond polite exchange of amenities and pleasantries. I had that kind of experience when I first met John Fauvel in the summer of 1988. With his untimely passing in the evening of 12 May 2001 this blessing came to a sudden end. In August of 1988 a workshop was initiated and organised by Otto Bekken at Kristiansand in Norway to "present, discuss and develop concrete ideas from the history of mathematics which can be used to motivate, to illustrate and to enhance the understanding of some key concepts and methods from the mathematics curriculum". The heterogeneous group of 24 invited participants from different parts of the world with different cultural or academic background --- mathematicians, mathematics educators, historians of mathematics --- turned out to work surprisingly well, each complementing the others and all forming a most congenial and dedicated group. They learned from each other, argued with each other, discussed among each other, but all the time in a relaxed and friendly atmosphere, which was helped by the scenic and serene environment of Gimlekollen Mediasenter, a boarding school by the side of woods and lake. Besides the regular programme of lectures/discussion every morning and afternoon, exchange of ideas went on during coffee breaks, at lunch/dinner tables, well into the night (if one can call it the night when it is still so bright at 22:00

hour up there in Scandinavia!), and even on the meandering trail through the woods to a refreshing dip in the cool lake in the early morning. I was at the time a newcomer to this group, many of whom were already by then very active in the. Almost immediately I felt that I was being received warmly into the family. It confirms my belief that a regard for history of mathematics can generate in a person a warm, gentle and humane attitude that will show up not just in the intellectual commitment in the discipline but also in other aspects of life. Among this group of good friends whom I made in the summer of 1988, John stood out as a tall, lean and young chap. For the ensuing twelve years we met quite frequently in conferences. He came to Hong Kong twice in this period, once in 1995 in connection with the making of a film series for the Open University and once in 1998 on his way out to New Zealand as the New Zealand Mathematical Society's Visiting Lecturer. In between such pleasant rendezvous we kept up our correspondence. John had always been so kind and supportive to me, and indeed he contributed much to my professional growth, through his books and papers, through his judicious advice and sometimes just some encouraging words at the right moment. In the summer of 1996 we expected to meet again in Sevilla in Spain and in Braga in Portugal, but the deteriorating health of my father resulted in my last minute cancellation of the trip. John, as thoughtful as usual, sent me a postcard from Sevilla with the signatures of many friends who were attending the conference and conveyed greetings from afar. That is typical of John, always having his friends in mind. A week later I received another postcard from John in Braga telling me how well Chun-Ip Fung, a former student of mine, stood in for me in the talk I was supposed to give. Again, that is typical of John, always ready to give credit and encouragement to newcomers. Last summer we expected to see each other again at Makuhari in Japan and later in Taipei in China. A few days before leaving for Japan I received an email from John saying that he had to miss the conference in Japan because he would be going into the hospital to have an operation on the bile duct. Thinking back, I am once more struck by his thoughtfulness towards friends. I was too careless at the time not to be aware of the seriousness of his illness, which he tried to hide from his friends in order not to cause them anxiety. If this was his intention, he did it well when he appeared in Taipei so cheerfully at the HPM Conference. Participants will certainly remember the jocular performance our good friend John put up at the Kara-oke! Looking back with sadness, I am at least glad that John left me with this last impression of him, a good friend in high spirits. I will treasure it. John, who had taught at the Open University in UK since 1974, was a renowned historian of mathematics, particularly in British mathematical development from the sixteenth century onward. He was the

President of the British Society for the History of Mathematics from 1991 to 1994 and had edited its Newsletter since 1995. Besides working as a historian of mathematics, John was also a strong and effective proponent of the relation between history of mathematics and mathematics education. As the Chair of HPM from 1992 to 1996 he promoted activities in the form of international conferences and in co-chairing (with Jan van Maanen) the 10th ICMI Study on the Role of the History of Mathematics in the Teaching and Learning of Mathematics. Were it not for the encouragement coming from John and Jan I might not have the great fortune to work closely with them in that project. Participants at that ICMI Study Conference held in Luminy in April 1998 will no doubt cherish the memorable evening of the conference dinner in which the "three John's" (John Fauvel and Jan van Maanen, the co-chairs, and Jean-Luc Dorier, the local organiser) were heartily congratulated and acclaimed for their admirable dedication and professionalism bestowed on the project. This is just one example of a wonderful collaboration in which John took part. All those who have the good fortune to be acquainted with John and who have worked with him together will, like me, miss him very very much. It is indeed a sad loss for all of us, but we also know that John's memory and contribution will continue to be felt through the many books and papers he had published, and his influence will be carried on through those who have known this wonderful man.

Man-Keung Siu



John Fauvel with George Green mug at Green's Mill, Snipton. HPMED

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I had the privilege of getting to know him in 1995 at the Cairns HPM meeting. At this, and all subsequent meetings I have attended, including the Luminy workshop, his presence and generosity of spirit has had an inspiring and unifying effect, academically and socially. My last encounter with him was at HPM in Taiwan, and I am glad that it was such a happy time for all who were there. It is also a great consolation that the ICMI study was published in time for him to see the fruits of his [and Jan's] endeavours. It is a tribute to him that there is such a diverse group of people on this mailing list - certainly but a small subgroup of all of the people whose lives have been enhanced by knowing John. He will live on in our hearts and minds. Kind regards,

Gail FitzSimons

Dear All, I share the same great loss of John with Costas and colleagues around the world. He served to be the angle of the HPM community that us the folks should never forget about. I had already been told this truly sad news by my friend and colleague in NYC. Yet given that John's spirit has already been with us, I also hate to admit that I am not capable to measure how he had done to the HPM! To me and colleagues and students in Taiwan, John's vision to balance the West and the East has given us a golden opportunity of exposure to the international HPM family. My students and I will edit one special issue of the *HPM Tongxun* in June in order to keep his memory alive in Taiwan. Best regards,

Wann-Sheng Horng

John Fauvel passed away last Saturday. This is a really tragic event for all the many friends and colleagues he had all over the world. We all know how much he has done to promote, history of mathematics, the didactics of mathematics and the relation between the two. I would like to propose, if there is still time for that, that the Proceedings of the 3rd UEE be dedicated to his memory as a small indication of admiration and respect for all that he has done in his fertile, stimulating, and rich career both as a scientist and as a man of the highest quality. Kind regards

Costas Tzanakis

Dear friends, With a deep sadness and my poor English I'd like to make a small contribution in memory of John. He was great, both as a professional and as a man. He emanated knowledge, justice and respect to everybody. Thanks to him I knew you all and I learnt a lot. It is a great loss for the community of mathematics education and for the good people all over the world. I am sure that his spirit will live in our hearts forever.

Vicky Ponza

I have thought about John over the week, and thought about the global dimensions of his attitudes and outlook, as well as of his friends and travels, I have thought of ways in which I (and hopefully also the eight people who have already written to me about my book proposal) would like to make the next stage of this link between mathematics, history, art and writing, into something that can be dedicated to his memory. In the meantime, a small group of us here in Dunedin are going to meet together for coffee from 8p.m. till 1a.m. on Wednesday (our time – 7a.m. to 12 noon GMT), to talk about him and remember stories and travels and conferences that we shared with him. Perhaps others might like to do something like that too, at whatever time of day they can come together. For those of you who cannot do that, please think about groups of people around the world thinking and talking about him up until and during the service, which begins in England at 11.30a.m. (GMT).

Coralie Daniel

Dear Friends, Although I had corresponded with him for several years, via e-mail, I first met John Fauvel in person in 1992 in Toronto at an international HPM meeting. I was mesmerised with his knowledge, with humour, and with his patience with me, a very amateur mathematics historian. I had presented a paper on Mary Everest Boole and asked him what he might know about her and who he might suggest that I contact about her. He gave me some ideas and then asked me if I would like him to read my paper. "Of course!" was my reply. Not only did John read my paper, edit it with excellent suggestions, he returned it to me before we left the meeting. I was speechless. I hadn't expected him to ask to read my paper. I considered myself fortunate that he offered. I never expected him to edit it. With his suggestions and corrections, I had the preliminary work that enabled me to apply with Florrie's help for and to receive a Fellowship from the Council for Basic Education to continue my research. Last summer, 2000, John came and addressed the National Science Foundation/ Mathematics Association of America Historical Modules Institute that Victor Katz and I co-direct. Our participants, professors and secondary teachers, were in awe, as well as was I. He discussed Euclidean geometry and the US Declaration of Independence with an understanding of US history that few have. John Fauvel will live on in my heart as a mentor and most important, a dear friend. May the Lord bless and keep John, may the Lord's face shine upon him, and give him peace.

Karen Dee Michalowicz

Dear all, It took me a long time to join those who sent so touching messages concerning John's death. So much has been said already, and yet, sorrow is so strong when you lose such an

exceptional person who made this community feel as a family (as many said before me). I met John in Seville during ICME. That is where we started our work in the IPC of the ICMI Study on the "role of history in the teaching of mathematics". Working with John was so pleasant and reassuring. He was so professional and yet so human. The week we all spent in Luminy was a great moment, where John gave us so much. The proceedings of this Study are great, thanks to John and Jan for their really hard work. I am no good for speeches in such circumstances, but my sorrow is deep. I did not meet John very often, but he counted more for me than many people I have worked with more closely. With friendly thoughts to all of you in this sad occasion.

Jean-Luc Dorier

The French Committee inter-IREM *Epistemology and History of Mathematics* heard of John Fauvel's death when we held our last meeting in Paris on Saturday May 19th. Many of us did not know that John was ill, so we were deeply staggered and we were sad to lose him so suddenly. We dedicated this meeting to him, and we evoked all the circumstances we met him, in France and all over the world. John was a great Friend of the Committee inter-IREM. He was the editor of *History in the Mathematics Classroom, the IREM Papers*, published in 1990 by The Mathematical Association thanks to him. He was one of the organiser of the First European Summer University on History of Mathematics, in July 1993 at Montpellier.

John was also a personal friend for many of us. We always remember his good smiling, his kindness and his humour. We think that many persons remember his funny talk, when he received the honour medal of the City of Montpellier.

John's French was not so bad, and he could understand us. So, "John, nous te regrettons déjà et nous ne t'oublierons jamais."

For the Committee inter-IREM

Evelyne Barbin

It was a shock to be told that John Fauvel had died. He was so much alive, so full of energy, knowledge, humour, friendliness. As one of many all over the world I have met him again and again at small and large conferences where he was one of the participants, or more often one of the organisers, and always very much the spirit of the whole arrangement. And it has been a privilege to talk with him, to correspond with him, and on a few occasions also to work together with him, lately on the ICMI-Study where he and Jan van Maanen did an incredible job of organising everything and inspiring everybody.

My wife and I will miss John, and we will remember him with gratitude and fondness.

Torkil Heiede

I prepared an obituary note to be published in the next Boletim da Sociedade Brasileira de História da Matemática. Although it is in Portuguese, I am sharing it with you. I am sure he is remembered in various parts of the world and in many languages. In the name of the Sociedade Brasileira de História da Matemática, which John supported since its foundation, I want to express our deep sorrow for the passing of such a good friend and distinguished scholar.

Em meados de maio, fomos chocados por vários e-mails e telefonemas. John Fauvel, um destacado historiador da matemática, havia falecido, vítima de uma disfunção do fígado e dos rins. Sua saúde estava comprometida há cerca de dez anos, e ultimamente deteriorava rapidamente. Enquanto estava hospedado em casa de amigos à espera de um transplante de fígado, que já havia sido programado, não resistiu e faleceu no dia 12 de maio de 2001, às 18:20, aos 54 anos. A grande perda para o mundo acadêmico só é superada pela enorme tristeza de todos aqueles a quem John havia cativado com sua generosa amizade. Todos aqueles que tiveram a oportunidade de conhecê-lo podem entender o quanto ele nos fará falta.

John Fauvel era Professor da Open University, na Inglaterra, desde 1974. Foi Presidente da British Society of History of Mathematics de 1991 a 1994 e Presidente do HPM/International Study Group on the Relations between History and Pedagogy of Mathematics, afiliada à ICMI/International Commission on Mathematics Instruction, de 1992 a 1996. Recentemente, juntamente com Jan van Maanen, John coordenou um ICMI Study sobre *History in Mathematics Education*, que deu origem a um livro de mesmo nome publicado pela Kluwer Academic Publishers, em 2000.

Seus importantes trabalhos de pesquisa, sobretudo sobre a história da matemática na Inglaterra a partir do século XVI, foram acompanhados por uma notável publicação de artigos sobre a história da matemática no ensino, coletâneas comentadas de clássicos da matemática e de obras que, tanto pelo conteúdo quanto pela beleza gráfica, marcaram época. Destaco, nesta última série, *Let Newton Be!*, publicado em 1988, *Möbius and His Band*, em 1993, e *Oxford figures: 800 years of the mathematical sciences*, em 1999. Foram muito importantes seus livros *Darwin to Einstein: historical studies on science and belief*, de 1980, e o utilíssimo *The history of mathematics: a reader*, de 1987.

Ao assistir uma conferência de John Fauvel, era inevitável sair alegre, contagiado pelo seu humor sutil e academicamente profundo, e pela riqueza de

informações que ele conseguia colocar em sua palestra. Sua figura, alto e magro, alegre e sorridente, convidava à aproximação. E ao se dar essa aproximação, confirmava-se o acadêmico generoso. Recordações pessoais surgem inevitavelmente ao lembrar um amigo querido. Conheci John desde os primeiros tempos de sua carreira. Estivemos juntos em várias conferências e projetos. Em 1994, ele me convidou para uma conferência no HIMED94, a conferência sobre educação organizada anualmente pela British Association for the History of Mathematics, justamente para falar sobre Etnomatemática. Um convite ousado, pois a etnomatemática era objeto de muitas críticas pelas autoridades educacionais conservadoras da Inglaterra de então. Mas foi mais que um convite para uma conferência. Fiquei hospedado em sua casa, que ainda estava em fase final de reforma, e pude ver e sentir o apego de John à cultura. Fiquei impressionado com sua biblioteca, CDs e coleção de fotos. John tinha interesses que iam muito além da história da matemática. Apoiava, com participação efetiva, inúmeras causas sociais. Lutava por um mundo com maior dignidade para todos. Ter sido seu hóspede foi muito enriquecedor. John levou-me a visitar a Open University, e ali aprendi muito sobre um novo conceito de educação, no qual ele atuava com competência e entusiasmo. E John não deixou de me levar a visitar Stonehenge e arredores, onde foi meu guia e ensinou-me muito sobre história. Foram para mim dias inesquecíveis. Como será inesquecível, para todos, a memória de John Fauvel.

Ubiratan D'Ambrosio

The Portuguese friends of John Fauvel will remember him as a wonderful and kind person that helped them not only to understand better what could be the value of history in mathematics education but, in a more relevant and lasting way, how, even if you are more advanced and informed in a certain subject, you could work with others in a way that really everybody is growing and learning from each other.

We have decided to try to convey this and other memories of our work with John in a collective article in a next issue of the journal of the Portuguese Association of Teachers of Mathematics.

Eduardo Veloso

The occasions we had of meeting John Fauvel were during the sessions of the Université d'Été Européenne, of which he was a real protagonist. He was a very special and unusually gifted man who brought to the meetings an attitude of enjoyment and relaxation which belied all the hard work and organisation. He did all this with a scholarship combined with great passion for the history of maths, profundity of thought and teaching sensitiveness. Together with his loving

memory we can count on a very supportive writing of his.

Giuliano e Maria Grazia Testa

I (Eri Yagi) was socked by the sudden death of Dr John Fauvel, informed by Prof. Ivor G-G. Dr Fauvel was very nice and helpful for me at two meetings, HM, where I participated. Particularly, he kindly edited my talk on the studies on the history of thermodynamics through a database, Christmas Meeting, Birkbeck College, December, 1998, for the Newsletter of British HM, No.39, 1999. I will remember his kind help forever. If possible, some memorial issue could be published for him.

Eri Yagi

The Canadian Society for History and Philosophy of Mathematics held its annual meeting this past weekend. At the beginning of the conference, we remembered John Fauvel's remarkable life and contributions. I said some words on his role as a scholar, his dedication and leadership in bringing the results of our scholarly labours into the classroom, his administrative leadership with both the BSHM and the CSHPM (he was a counsellor); and most of all, his enthusiastic, yet gentle, warm, and incredibly supportive spirit.

We held a minute of silence in his honour, and dedicated the meeting to his memory. Of all the wonderful people in our field, John was (other than my doctoral supervisor) my most valued role model. I will miss him greatly.

Our best wishes to our British colleagues, who must find a way to cope with this great loss.

Glen Van Brummelen

John was both a good friend and a good teacher to me. I share the sorrow that embraces many of us who live in different parts of the world, and who happen to be privileged to know John and his loving character. His academic work, his contribution to the education community in its widest sense, and his encouragement to the younger generation will certainly continue to flourish on earth and in the intellectual world.

Chun-Ip Fung

Dear friends and colleagues, on behalf of the Editorial Board of the journal *THEMES in Education* in which John served as a Consulting Editor, I would like to express my deep sorrow for his loss. We, in *THEMES*, that used to know him are deeply shaken by this tragic event. Any word is poor to express feelings such as the death of John caused to all of us. To honour his memory an obituary is going to appear in the next issue of *THEMES* (Sept.2001). You may send to us any contributions concerning his life and ergography. He may rest in peace.

Constantine D. Skordoulis
Physics & Epistemology of Natural Sciences

HPM Newsletter No. 47, July 2001, page 12

Department of Education, University of Athens
Navarinou 13A, Athens GR-10680

Apologies

My apologies, but in the last HPM Newsletter there were two mistakes that I failed to notice before sending it to distributors. These were both in the article *The Dangerous Hole of Zero*. Firstly I forgot to acknowledge the author. It was Professor R. C. Gupta from India who submitted the article, and my sincere apologies to him and all the HPM Newsletter readers for this oversight. Secondly in example 4 the "wrong rule" was misprinted. The correct paragraph is shown here. 4. Bhaskara II in his famous *Lilavati* (12th century) gives the wrong rule $(a \times 0)/0 = a$. His commentator Ganesa (1545) remarks that the rule comes by cancelling zero from the numerator and denominator!

Reviews

If you would like to be involved in reviewing books or magazines for this section, please send your contact details and area(s) of interest to the editor who will forward books or magazines for review as and when they become available.

If you wish for a book to be reviewed, please send it to the editor who will arrange for it to be reviewed.

Have you read these?

This section contains references to books or articles that may be of interest to all those concerned with the history of mathematics. Please send details with complete bibliographic information to the editor for inclusion in future issues.

The Sum God



The scribble was a chance encounter with one of the greatest scientific minds the world has known.

Hidden underneath a crease in the spine of a page of an old prayer book, someone had - in between words in Greek - drawn a small circle with a dot in the centre, in ink now invisible to the naked eye. From the context of the sentence it was clear that it was shorthand for *kuklos*, Greek for circle. As the scientists stared at a photograph of the page taken under ultraviolet light, they knew that a little piece of history was in the making. It was, they realised, the Archimedean symbol for a circle - which had never been seen or been known about in modern times. As they looked closer still, they began to see more that intrigued them. But it would take many more painstaking days before the full significance of their discoveries was understood.

So starts the article in *The Sunday Times Magazine* of 17 June 2001.

This report by William Peakin mentions that Archimedes laid the foundations of modern science and mathematics. But some of the ancient Greek's greatest writings were believed to have been destroyed. Now, scientists are miraculously recovering the works - and eureka! They add up to an amazing revelation.

To see the full article go to www.sunday-times.co.uk/cgi-bin/BackIssue? and select the back issue of the magazine for 17 June 2001

Peter Ransom

Have you been here?

The British Society for the History of Mathematics web site at www.dcs.warwick.ac.uk/bshm/ has many links to related sites.

The HPM Americas web site at www.sju.edu/~ambruso/hpm/Welcome.html

The Italian Society of History of Mathematics web site at www.dm.unito.it/sism/index.html

Information about other sites would be welcomed by the editor.

Society news

Italian Society of History of Mathematics (<http://www.dm.unito.it/sism>)

In November 2000, on the occasion of the conference "From calculus to analysis, history and prospects", which took place at L'Aquila University, the Italian Society of History of Mathematics (SISM) was founded. The Society's objective is to stimulate research and studies in the

field of history of mathematical sciences, supporting publications and meetings of members and in general the propagation of the culture in history of mathematics.

The Society is characterised by the voluntary activity of its members, who provide their spontaneous contributions free of charge in various ways and engage themselves to pay the annual association fee of Lit. 50,000 (26 Euro), post office account 27353283 registered in the name of the Italian Society of History of Mathematics (SISM), via C. Alberto 10, I 10123 Turin (Italy).

Applications for membership should be addressed to the President, using the form available for this purpose in the Society's Internet site: www.dm.unito.it/sism/index.html. Seat of the Society is the Department of Mathematics of the University of Torino. All members joining within four months of the foundation date will be considered Founder Members.

For the first two years the President and the Directive Board have been nominated as follows:

President:	C. S. Roero
Vice President:	L. Pepe
Secretary:	L. Giacardi
Treasurer:	F. Cattelani
Board members:	P. Freguglia, E. Giusti, G. Israel, P. Napolitani, F. Palladino

Conferences and meetings in Italy:

24-27 July 2001, Da Hilbert a Poincare': momenti storici significativi, Camigliatello Silano (Cosenza), Hotel Aquila & Edelweiss, per dettagli: Prof. Luigi Maieru'.

1-7 August 2001, L'arte del pensare: logica e matematica, Santuario di S. Ignazio, Lanzo Torinese, Torino

12-14 October 2001, Ruolo delle Società scientifiche in Italia, LXVI Riunione della SIPS, Sala conferenze del complesso dei Dioscuri, via Piacenza 1, Roma, organizza C. Bernardini (Presidente SIPS), mail: sips@quipo.it

9-10 November 2001, I Convegno della Società Italiana di Storia delle Matematiche, Modena, Dipartimento di Matematica, informazioni: Clara Silvia Roero

Books:

"La Matematica in Italia, 1800 - 1950", Giusti E. & Pepe L. ed., Il giardino di Archimede: un museo per la matematica, Firenze, 2001.

Contents: Un itinerario attraverso la storia della matematica contemporanea – schede bibliografiche – Indice cronologico delle schede e degli autori.

Association of Mathematics Teachers of India

At their 34th Annual Conference held at Visakhapatnam last year Professor R. C. Gupta, Ph.D., F.N.A.Sc gave his Presidential Address on *Aryabhata, the Revolutionary Scientist*. The introduction to this address is given here.

In 1975, India launched her first artificial satellite called ARYABHATA named after the celebrated Indian scientist who lived 1500 years ago. That was a great event for the nation in the present space era of science and technology. While celebrating the Silver Jubilee of the event, we also have an opportunity to remember Aryabhata and his contribution to the evolution and development of scientific astronomy and mathematics in India. In fact the current academic year 1999-2000 also marks the 1500th anniversary of his celebrated work-the Aryabhatiya believed to be composed in A.D.499.

Following the tradition of attaching divine origin to all sciences, the Narada-purana ascribes the initial enunciation of the Jyotisa-sastra (including mathematics) to Brahma in antiquity. Brahma (or Pitamaha) is also included among the authors of the 5 apauruseya classical siddhantas namely Paitamaha, Saura, Vasistha, Romaka, and Paulisa. Originals of all these are lost but their summary is available in the Panca-siddhantika of Varahamihira (6th century).

It seems that towards-the end of the 5th century itself, people found that none of the five prevalent Siddhantas was yielding satisfactory result, that is, there were marked differences between predicted and observed astronomical phenomena. The young Aryabhata (born 476) keenly noticed all this, made careful observations, and propounded astronomy on more scientific lines. An ancient saying describes this rescue work in a popular way as follows:

"When the methods of the five Siddhantas began to yield results conflicting with the planets and the eclipses etc., there appeared in the Kali age at Kusumapuri Surya himself in the guise of Aryabhata, the Kulapa expert in astronomy."

The Aryabhatiya was composed in such a needful background and it immortalised the name of Aryabhata forever. It is the first Indian mathematical and astronomical treatise which can be dated with some certainty (in contrast to Vedanga Jyotisa, Sulba-sutras, etc.). In it the

Indian astronomy is remodelled on scientific lines using improved astronomical parameters, new techniques, and innovative methods to provide more accurate results. Many new features of Indian astronomy and mathematics appear in it for the first time. Aryabhata has been hailed variously as the father, maker, and saviour of astronomy in India. Indeed his work inspired and motivated further developments of exact sciences in India.

The full address can be found in *The Mathematics Teacher* (India), Vol.36(2000), pp.1-9 together with details of the Kundkund Gyanapeeth Award given to professor Gupta last March.

Professor Gupta has published about 400 articles on history of mathematics. He is glad to send a list of his publications to anyone interested in them. His contact address is Prof. R. C. Gupta, Ganita Bharati Academy, R-20, Ras Bahar Colony, Jhansi-284003, U.P. INDIA

Announcements of events

International Conference on Mathematical Education

The Northeast Normal University of China is to host an international conference on mathematical education from

16 August to 22 August 2001.

The conference will focus on the following areas:

1. Reform of mathematics curriculum in elementary and secondary schools
2. Teaching mathematics in elementary and secondary schools - pedagogy
3. The use of technology in teaching mathematics
4. Pre- and in-service teacher training
5. Normal education - theory and practice

Registration (covers conference materials and meals) \$200 before 15 June 2001, \$220 later

Contact Professor Lianju Sun, Mathematics Department, Northeast Normal University, 138 Ren Min Avenue, Changchun, China 130024
E-mail CCICME@nenu.edu.cn

From Sumer to Spreadsheets: the History of Mathematical Table-making

22-23 September 2001,

Kellogg College, Oxford, UK

The regular autumn residential meeting of the British Society for the History of Mathematics takes place in Oxford again for 2001, by popular demand, and is on the unusual but deeply rewarding subject of mathematical table making. It will give a technical, institutional, intellectual and

social history of tables from earliest times until the late twentieth century, with talks given by leading scholars from Europe and north America.

Tables of one sort or another have been an important feature of mathematical activity for some 4500 years. Not long ago logarithm tables were the main calculation aid, and the concept of a table has more recently taken on new dynamic life in the form of a computer spreadsheet. Issues of design, utility, information processing, and capitalist production methods are all invoked in the insights of historians in a range of disciplines over recent years.

Speakers include Benno van Dalen (Frankfurt), David Grier (Washington DC), Eddy Higgs (Oxford), Graham Jagger (Open University), Chris Lewin (Hampshire), Arthur Norberg (Charles Babbage, Institute, Minneapolis), Eleanor Robson (Oxford), Stephen Johnston (Museum of the History of Science, Oxford), Doron Swade (Science Museum, London), Mike Williams (Calgary), George Wilkins (formerly Nautical Almanac Office), Martin Campbell-Kelly (Warwick), Mary Croarken (National Maritime Museum, Greenwich).

Enquiries: Mary Croarken, 12 Dovedales, Sprowston, Nonvich NR6 7QE: mgc@dcs.warwick.ac.uk
Booking inquiries to Hazel Richards, Administrator, Day & Weekend Schools, OUDCE, 1 Wellington Square, Oxford OX1 2JA.
Tel 01865-270380 email ppsdayweek@conted.ox.ac.uk

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9-10 November 2001

I Convegno della Società Italiana di Storia delle Matematiche, Modena, Dipartimento di Matematica, informazioni: Clara Silvia Roero

For details of these meetings contact the Italian Society of History of Mathematics (SISM), via C. Alberto 10, I 10123 Turin (Italy) or check their web site at www.dm.unito.it/sism/index.html

The First International Conference of the New Millennium on History of Mathematical Sciences

20-23 December 2001

Delhi

The Indian Society for History of Mathematics, is planning to organise 'The First International Conference of the New Millennium on History of Mathematical Sciences' on December 20-23, 2001 at Delhi in collaboration with Ramjas College, Delhi and other national institutions. The precise academic programme and other details will be available by June 15, 2001. The conference will cover all aspects of the history of mathematical sciences, and in particular, the ancient Indian history of the subject, with a forbearance on societal needs.

The official language of the conference will be English.

Offers of papers and enquiries should be made to Professor B S Yadav, Administrative Secretary, INDIAN SOCIETY FOR HISTORY OF MATHEMATICS, Department of Mathematics, Ramjas College, University of Delhi, Delhi 110007, India. E-mail: indianshm@yahoo.com Tel. (011) 707 3878

For further information about this conference contact

Professor Y. P. Sabharwal, Organising Secretary ICHMS-2001, Dept. of Mathematics and Statistics, Ramjas College, Delhi University, Delhi-110 007 INDIA

Email

ichm2001rjc@yahoo.com or

ypsabharwal@yahoo.com

History of Arab Mathematics

30 May - 2 June 2002

Introduction

L'organisation d'un colloque international périodique sur l'histoire des mathématiques arabes est d'ores et déjà une coutume. Six colloques ont déjà été organisés : Algérie en 1986, Tunisie en 1988, Algérie en 1990, Maroc en 1992, Tunisie 1994 et Algérie 2000.

Ces colloques ont toujours été un espace pour renforcer l'intérêt pour l'histoire des mathématiques arabes en tant que phase fondamentale dans l'histoire générale des mathématiques. Outre le fait qu'ils permettent la rencontre entre des chercheurs et des spécialistes de différents pays, ces colloques constituent une opportunité pour diffuser et faire connaître les travaux réalisés sur l'histoire des mathématiques arabes. Notamment à travers :

- la découverte, l'édition et la traduction de manuscrits importants
- la mise en valeur de la relation entre les mathématiques et les besoins sociaux et religieux de la société
- l'identification des traditions d'enseignement des mathématiques dans la civilisation arabo-islamique
- la mise en relief des liens entre mathématiques et les autres domaines de la connaissance
- la mise en évidence des contributions de l'Occident musulman, Grand Maghreb et Andalus, dans la construction de l'édifice mathématique.

C'est dans la continuité de cette tradition que le Groupe de Recherche En Didactique de l'Informatique et des Mathématiques (GREDIM) de l'Ecole Normale Supérieure de Marrakech organise le 7^e colloque maghrébin sur l'histoire des mathématiques arabes du 30 mai au 02 Juin 2002.

Par ailleurs, en plus des résultats au niveau de la recherche, ces colloques contribuent à la prise de conscience du rôle pédagogique de l'histoire des mathématiques en tant qu'outil de formation et d'enseignement. Dans le but de renforcer cette tendance, le comité d'organisation s'est permis d'adjoindre aux thèmes étudiés dans les colloques précédents une session sur l'utilisation de l'histoire des mathématiques dans leur enseignement pour ce 7^e colloque.

31 octobre 2001: Date limite d'inscription

30 novembre 2001: Date limite d'envoi des résumés des communications

31 décembre 2001: Notification de l'acceptation ou de refus de la communication

01 mars 2002 : Diffusion du programme

15 avril 2002: Envoi des textes des communications

30 mai -02 juin 2002: Tenue du 7^e colloque maghrébin sur l'histoire des mathématiques arabes

Conditions de participation

1. les communications doivent être originales et n'ont jamais fait l'objet de publication
2. le règlement des frais de participations qui valent 300 dirhams. Ces frais couvrent :
 - l'hébergement du 29/05/2002 soir au 03/06/2002 matin.
 - les repas du matin et de midi durant la période du colloque
 - les actes du colloque
3. Le comité d'organisation fait des démarches auprès des organismes nationaux et internationaux pour l'obtention de subventions lui permettant la

prise en charge (totale ou partielle) de voyage des participants qui présentent une communication.

Langues du colloque

Les résumés et les interventions peuvent être présentés dans l'une des langues suivantes : Arabe, Français, Anglais

Thèmes du colloque

1. Mathématiques

- Algèbre
- Géométrie
- Arithmétique
- Théorie des nombres
- Analyse combinatoire
- Trigonométrie

2. Astronomie

- Modèles planétaires
- Tables astronomiques
- Sciences du temps
- Instruments astronomiques

3. Mathématiques Appliquées

- Sciences d'héritages
- Architecture
- Optique
- Mécanique d'agréments ou utilitaires
- Astrologie
- Musique

4. Mathématiques et société

- Les manuels mathématiques
- Les infrastructures de l'enseignement
- Mathématiques et environnement culturel et idéologique
- Mathématiques et philosophie
- L'héritage mathématique pré-islamique
- La transmission des mathématiques arabes
- Mathématiques et classification des sciences

5. Session sur l'utilisation de l'histoire des mathématiques dans l'enseignement

- Rôle de l'histoire des mathématiques dans leur enseignement
- Histoire des mathématiques et formation
- Histoire des mathématiques et construction/analyse de concepts
- Histoire des mathématiques et résolution de problèmes
- Histoire des mathématiques et recherche en didactique

Correspondance :

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ENS , B.P 2400, Marrakech, Maroc
e-mail comhisma7@ensma.ac.ma
Site ensma.ac.ma/comhisma7 (en construction)

Abel Bicentennial Conference 2002

3-8 June 2002
Oslo

The year 2002 marks the bicentennial of the birth of Niels Henrik Abel, 1802-1829. The Norwegian Academy of Science and Letters, The Norwegian Mathematical Society and The Norwegian Mathematical Council with support from the International Mathematical Union and the European Mathematical Society, have taken the initiative to commemorate this event by inviting the international mathematical community to the Abel Bicentennial Conference 2002 to be held at the University of Oslo from Monday, June 3, to Saturday, June 8, 2002.

The Conference will present an overview of the mathematical heritage of Niels Henrik Abel and, based upon this heritage, identify new mathematical trends for the 21st century.

Check it out at
www.math.uio.no/abel/

The 5th International Symposium On the History of Mathematics and Mathematical Education Using Chinese Characters (ISHME5)

9-12 August 2002

Tianjin Normal University, Tianjin, China

Symposium themes are:

- 1) Mathematics of using Chinese characters: Transformation from traditional mathematics to modern mathematics
- 2) Studies on the history of mathematics of Korea and Viet Nam
- 3) Exchange and comparison between mathematics of using Chinese characters and mathematics of India and Arab
- 4) Mathematical education of using Chinese characters: A comparative approach.

For more information, contact:
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Tianjin, P.R.CHINA, 300074
e-mail: zelinxu@eyou.com
Website: duheng.qzone.com/ISHME

Third International Conference on Mathematics Education and Cultural

History of Mathematics in the Informatics Society

24-27 July 24 2002
Kyoto, Japan

For more information contact:
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Cheers John!
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