

The Euler Society Newsletter



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Visit The Euler Society home page at
<http://www.eulersociety.org>.

Euler 2003 a Huge Success

The Second Annual Meeting of The Euler Society at the Conference Center of Roger Williams University was another huge success. It featured The Euler Lecture by Society Chancellor Ron Calinger. His title was "Euler's Golden Decade in Berlin: The First Half to 1751. He brought to light a great number of little-known details of Euler's life. For example, Euler long suffered from the intermittent high fevers of scropula. Rather than complaining, he inquired frequently about the health of others. He reported that Euler's wife Katrina, "Meine Geliebte" as he called her, was Swiss, not Dutch as is often said. We learned that Euler paid 6000 Reichthaler for his home in Charlottenburg and that the estate provided all of his firewood and half of his food. We also learned about the role of Formey, simultaneously the pastor of Euler's church and an important, if inept character in the Court and the Academy.

There were twelve other talks at the conference, as well as two workshops on reading Euler in the original languages, one each on Latin and French. We were also visited by Marianne Gerber, the Swiss Consul from Boston, who described the resources at their Consulate available through their SHARE program.

Twenty-seven people attended the conference, two more than attended last year.

Photos from Euler 2003

Several pictures from last year's meeting of The Euler Society appear in this newsletter. Because there are technical problems keeping captions attached to their photos when eMailing these documents, we'll put all the captions here in the text.

The first photo, immediately below, is the official Group Photo taken on the last day of the conference. How many can you identify? Answers will be in the next issue of the Newsletter.

The next photo is Marianne Gerber, the Swiss Consul from Boston, addressing the Conference about the resources available through the Consulate and its SHARE program.

The last photo shows Dominic Klyve and Fred Rickey at the workshop on reading Latin.

If you have photos of Euler 2003, or of anything else regarding Euler, please see the Call for Photos below.



New Online Resources

Dominic Klyve and Lee Stemkoski announced The Euler Archive, online at math.Dartmouth.edu/~euler.

The work in progress already includes scanned images of more than 60 of Euler's original papers from the *Commentarii* of the St. Petersburg Academy (not the reprints as they appear in the *Opera Omnia*, but the originals!) and an electronic version of the Eneström Index arranged in a variety of useful ways. They also give us the Tables of Contents for the volumes of the *Commentarii* they have scanned, so we can tell who else was publishing in the same volume and what the other issues of the year were. More useful stuff is to come. Dominic and Lee say, "With the Euler Archive, we hope to move 18th century scholarship into the 21st Century."

As Roger Godard mentioned in Rhode Island, the Berlin-Brandenburgische Akademie der Wissenschaften has put on line at <http://www.bbaw.de> a great number of their early serial publications, including the elusive *Miscellanea Berolinensia ad incrementum scientiarum, ex scriptis Societati Regiae Scientiarum exhibitis edita* and the *Histoire de l'Académie Royale des Sciences et Belles Lettres*. The *Miscellanea Berolinensia* contains half a dozen of Euler's papers, while the *Histoire* contains over a hundred. All of them are rather hard to find. Here, too, full Tables of Contents are on line, as well as the full contents of each volume, so you can read some of the published works of scholars not as well known as Euler. The index of their historical on line publications is at <http://www.bbaw.de/pub/historisch.html>.

Euler's elementary arithmetic textbook the *Rechenkunst* is on line (in German) at Christian Siebeneicher's site at www.mathematik.uni-bielefeld.de/~sieben/euler/rechenkunst.html.

Over 70,000 digital documents are on line at France's Bibliothèque nationale at <http://gallica.bnf.fr>. These include ten apparently random volumes of the *Opera Omnia*, I.2, I.7, I.8, I.17, I.18, I.20, I.21, II.1, II.2, and III.1, two of Euler's papers, and French and Latin editions of the *Introductio*.

Euler, Switzerland and 2007: A shared vision of the Swiss Ministry of the Interior and The Euler Society

by John Glaus

Marianne Gerber, the Swiss Consul from Boston was invited to Euler 2003 at Roger Williams University by The Euler Society's Executive Committee to foster a dialogue between Euler's country of origin and our nascent society. Marianne informed the Euler 2003 attendees of Switzerland's mission in the United States in general but to Boston in particular. Switzerland is represented in the Boston area through its consulate SHARE, which is the acronym for Swiss House for Advanced Research and Education. The concept of providing services beyond the traditional visa and passport and "home away from home" services of most Consulates is the direct result of Switzerland's desire to cast itself into a role as the economic and intellectual global powerhouse. What has facilitated the way in which Switzerland has been historically? It is because Switzerland is a natural resource-poor country with a talented and able workforce that has taken advantage of its cultural stability and positioned itself in the world community after more than seven centuries as Europe's second oldest democracy after Iceland.

The Euler Society approached Swiss House in early 2002 to accommodate Euler 2002 and realized that the venue was not large enough for our needs; Marianne contacted us in early July 2003 and advanced the idea that The Euler Society and Swiss House had mutually beneficial talents which could be used to the greater purpose of promoting Leonhard Euler and Switzerland. It was with that in mind that Marianne was able to inform us on how best to initiate a project by offering the Swiss House facilities for a smaller meeting and "virtual" transatlantic conference with colleagues at the University of Basel, the Editors of Euler's *Opera Omnia* at Birkhauser and any of a number of research persona involved in the study and dissemination of Euler's work. This would include Ruediger Thiele, vice-president of The Euler Society and Michael Raith, minister of the Reformed Methodist Church and Euler scholar of Riehen, the village where Euler grew up.

As Euler's tercentenary approaches in 2007, we as a society will begin to sense the encompassing importance of Euler's reach by noting the presence of other organizations and learned societies, individual researchers, students and the naturally curious to whom a very cordial hand of support should be given not only by our own society and the United States but by Basel, St. Petersburg and Berlin.

Information on the resources at Swiss House and at SARE-Boston is on line at <http://creativeswitzerland.com>.



At the Bookstore

Two books on Russian Science, reviewed by Dominic Klyve

Writings in English about the Russian Scientific establishment are few and far between, and even among these it is difficult to find a work which focuses on the life and times of Euler. The most recent addition to the spartan collection is

Graham's "Science in Russian and the Soviet Union." Though well-written and readable, the focus is on the science of the Soviet Union, and only one chapter spans all of Russia's history through 1800 (Euler appears on pp 29 and 30 only).

Probably the most comprehensive and most scholarly of the works is Vucinich's "Science in Russian Culture". 'Volume 1: a history to 1860', contains 20 or 30 pages about the formation and early workings of the Saint Petersburg Academy, and about Euler's place there. His dealings with various Czars, Czarinas, and Academy Presidents are given more time than Euler's science, and the information is quite interesting. Random fact I learned: The President of the Academy from 1734-1740 was Baron Johann Albrecht Korf. (Euler's eldest son Johann Albrecht was born in 1734).

Vucinich concludes his section on Euler with some information on his students. As so often seems to be the case, this Russian side of Euler's work has been much ignored -- not one of Euler's Russian students appears on the Mathematics Genealogy Project, for example. Eight of Euler's "disciples" are named (Johann Euler, Petr Inokhodtsev, Wolfgang Krafft, Anders Lexell, Nicolaus Fuss, Mikhail Golovin, S. K. Kotel'nikov, and Stepan Rumovskii. Should we tell the Mathematical Genealogy Project about these people?) Their work consisted more in teaching, writing math textbooks, modernizing the public school curricula, and amplifying Euler's work. Vucinich writes:

Euler's students were a powerful link between Euler and Russia's great mathematicians of the nineteenth century. They gave continuity and necessary vigor to the development of a profound mathematical tradition in Russia. In [sic] was because of them that Russia recognized Euler's greatness and paid him deserved homage. While Euler was still alive, the Academy commissioned a recognized artist to execute a mural in the Assembly Hall, representing allegorically the Wisdom of Geometry and including as part of the composition the formulas of Euler's theory of Lunar motion....

Vucinich's book is a worthwhile read for anyone looking for a scientific and cultural context in which to put Euler's work.

Publication Data: *Science in Russia and the Soviet Union: a short history*, Loren R. Graham. Cambridge University Press, 1993.

Science in Russian Culture: a history to 1860, Alexander Vucinich. Stanford University Press, 1963.

Legal Status

Chancellor Ron Calinger and Treasurer Mary Ann McLoughlin announced that The Euler Society legally exists in the eyes of the United States Government. This gives the Society the right to do certain kinds of business, including opening a bank account and cashing all those checks that Members have been sending. Our status will be reviewed in about five years. Thanks to Ron and Mary Ann for all their hard work on this. It is virtually impossible for an organization such as ours to survive without this kind of legal status.



Proceedings Deadline

Items for the Proceedings of Euler 2003 should reach the Editor by October 1, 2003. Preferred format is as a Word document. Second choice is a .pdf, and third is as paper. EMail to esandifer@earthlink.net or send by StampMail to Ed Sandifer, 3 Juniper Road, Newtown, CT 06470, USA.

Items received in .doc format will appear in the Proceedings both in .doc format and in .pdf format. We will try also to put them in .html format, but there may be insurmountable technical difficulties.

Upcoming Events

Euler 2004 – Countdown to the Tercentenary

The Euler Society will return to the Conference Center at Roger Williams University for Euler 2004. As in 2003, the meeting will begin with a Sunday evening reception, and will extend to noon on Wednesday. The dates will be August 8 to 12.

Registration procedures will be very similar to those for Euler 2003. Abstracts will be due on May 1.

Euler in Phoenix

Bill Dunham and Ed Sandifer will be running a Minicourse on Euler at the Phoenix Combined Mathematics Meetings of the MAA, AMS, AWM, and others next January. The Minicourses are the ones that meet twice during the meetings for two hours at a time. Bill Dunham wrote *Journey Through Genius* and *Euler: The Master of Us All*. Ed Sandifer is known to some as the Editor of this Newsletter. The MAA usually charges a little extra, something like \$35, to attend a Minicourse.

Mathematical Instruments in Phoenix

The Phoenix meetings (see above) will also feature a Short Course on mathematical instruments, titled “The Material Culture of Mathematics.” Short Courses are the ones that meet all day for two days before the main meetings begin. The session “Mathematics in the Ancient World” at the Baltimore meetings was a Short Course. The Short Course is being organized by Amy Shell-Gellasch and Glen van Brummelen. Short Courses usually cost a bit more than MiniCourses, something on the order of \$100.

Proceedings

The Proceedings of Euler 2002 were distributed on CD (compact disk) at Euler 2003. Members of The Euler Society and others who attended either Euler 2002 in Rumford or Euler 2003 in Rhode Island are entitled to copies. If you did not receive a copy, please send your name and mailing address to the Editor at esandifer@earthlink.net.

Please note that the Proceedings include a folder “Special Content.” This folder includes several gems, including a complete .pdf of Condorcet’s *Eloge* of Euler. It is in French, but readers of French who are familiar with other common accounts of the life of Euler, say that of E. T. Bell, will notice a great many similarities. We plan a number of such items as Special Content in future volumes of the Proceedings.

The Proceedings also include a folder containing all the issues of this Newsletter published prior to the Conference.

Call for contributions

The Newsletter will gladly include short contributions about Euler, his life, works and influence, and we will provide links to longer contributions. Contact the Editor at esandifer@earthlink.net.

Call for Photos

Readers are invited to send photos for use in the Newsletter. Pictures taken at Euler 2003 are appropriate, as well as anything else relating to Euler, his times, his work and his influence. Small numbers of electronic images can be eMailed to the Editor. Larger numbers should probably be burned onto a CD and mailed. Printed photographs may also be mailed; we will scan them.

The Mission

The Mission of **The Euler Society** is threefold: It encourages scholarly contributions examining the life, research, and influence of Leonhard Euler. In part, these will be set within his times, that is, within the Enlightenment, the rise to European power status of Russia and Prussia, and the growth of royal science academies. **The Euler Society** will also explore current studies in the mathematical sciences that build upon his thought. And it will promote translations into English of selections from his writings, including correspondence and notebooks, in leading up to the tercentenary of his birth in 2007.

The Euler Society Executive Committee

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