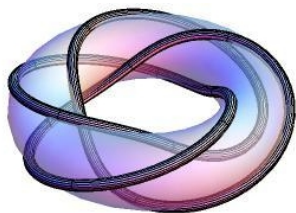


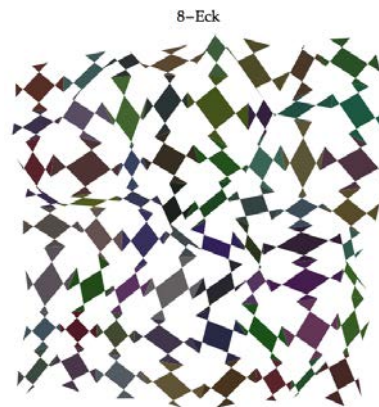
zu bekommen? Dabei wurden u.a. Codierung und Texturierung verwendet.



Prof. Dr. Rolf Sulanke (Humboldt-Universität Berlin) sprach über Möbius Geometrie mit Mathematica. Möbius Geometrie wurde als die konforme Geometrie der dreidimensionalen Sphäre behandelt. Um sie mit Mathematica zu bearbeiten, sind Erweiterungen des begrifflichen Apparats nötig, die interessante Anwendungen auch in anderen Gebieten ermöglichen: 3D-Kreise und Sphären in der euklidischen Geometrie, pseudo-euklidische lineare Algebra mit einem Orthogonalisierungsverfahren, und die Korrespondenz von Objekten der dreidimensionalen Möbius Geometrie zu Objekten des pseudo-euklidischen fünfdimensionalen Vektorraums. Der Vortrag stellte nur einige Beispiele für die Anwendung dieser Erweiterungen in der Möbius Geometrie vor. Das gesamte Material einschließlich der Mathematica Notebooks und Packages kann man von der

Homepage <http://www-irm.mathematik.hu-berlin.de/~sulanke/> herunterladen.

Abschließend gab es von Univ.Prof. Dr. em. Götz Uebe, (HSU Hamburg) einen unkonventionellen, anschaulichen und erfrischenden Beitrag zum Thema „Kunst, Geometrie und Zufallszahlen“. Herrn Uebe gelang es mit Mathematica unter Nutzung von Zufallszahlen und Grundobjekten wie Linie, Quadrat etc., eine ganze Reihe nicht-gegenständlicher „Kunstwerke“ zu erstellen. Diese ähnelten stark Werken von bekannten Künstlern wie Josef Albers, Blinky Palermo, George Kortsmit, Piet Mondrian, Georg Nees, Bridget Riley, Victor Vasarely, Damien Hirst, Herman de Vries und vielen anderen. Kunst und Statistik haben also einiges gemein.



Mit der nachmittäglichen Kaffeerunde klang der Mathematica-Tag gegen 17 Uhr aus. Der nächste ist bereits für das nächste Jahr geplant, und Sie können sich anmelden auf <http://www.ordinate.de/mathematicaTag.htm>.

Carsten Herrmann

Hinweise auf Konferenzen

1. Polynomial Computer Algebra '2012

St.Petersburg, Russland, 23. – 28.04.2012

<http://www.pdmi.ras.ru/EIMI/2012/pca/>

The Conference is devoted to modern polynomial algorithms in Computer Algebra which are gaining importance in various applications of science as well as in fundamental researches.

Main subjects: Groebner bases, combinatorics of monomial orderings, differential bases, involutive algorithms, computational algebraic geometry, D-modules, polynomial differential operators, parallelization of algorithms, algorithms of tropical mathematics, quantum computing, cryptography, matrix algorithms, complexity of algorithms and others.

2. Tagung der Fachgruppe Computeralgebra

Kassel, 10. – 12.05.2012

<http://www.fachgruppe-computeralgebra.de/TagungKassel>

Diese Tagung setzt die Reihe der Tagungen der Fachgruppe (Kassel 2003, 2005, 2009, Kaiserslautern 2007) fort. Eine ausführliche Ankündigung finden Sie auf Seite 7.

3. Symbolic Computation and Applications (SCA) 2012

Aachen, 17.05.2012 – 20.05.2012

<http://www.computeralgebra.de/SCA2012/>

Following the success of the conference “Symbolic Computation and its Applications” (Maribor, Slovenia, June 30 to July 2, 2010) we are organizing in Aachen, Germany the second conference “Symbolic Computation and its Applications”, May 17 to May 20, 2012.

The aim of this conference is to bring together researchers from different corners of symbolic computation. The interplay between various concepts, methods, algorithms and software packages proves to be enriching all participating sides. New developments in the theory, algorithms, software as well as new solutions to important applied problems are subjects of the broad discussion. The topics include, but are not limited to

- Symbolic computation in differential, difference and mixed equations, both linear and nonlinear
- Algebraic analysis, D -modules and mixed discrete-continuous linear functional systems
- Dynamical systems and nonlinear ODEs
- Computational commutative algebra and algebraic geometry

- Cryptanalysis
- Symbolic-numerical computations

Organizing committee: Viktor Levandovskyy, Eva Zerz (RWTH Aachen), Valery Romanovski (CAMTP, Maribor, Slovenia).

4. **SEA 2012 – 11th International Symposium on Experimental Algorithms**

Bordeaux, France, 7. – 9.06.2012

<http://sea2012.labri.fr/>

SEA, previously known as WEA (Workshop on Experimental Algorithms), is an international forum for researchers in the area of design, analysis, and experimental evaluation and engineering of algorithms, as well as in various aspects of computational optimization and its applications. The preceding symposia were held in Riga, Monte Verita, Rio de Janeiro, Santorini, Menorca Island, Rome, Cape Cod, Dortmund, Ischia Island, and Crete.

The main theme of the symposium is the role of experimentation and of algorithm engineering techniques in the design and evaluation of algorithms and data structures. Submissions should present significant contributions supported by experimental evaluation, methodological issues in the design and interpretation of experiments, the use of (meta-)heuristics, or application-driven case studies that deepen the understanding of a problem's complexity.

5. **ACA 2012 – 18th International Conference on Applications of Computer Algebra**

Sofia, Bulgaria, 25. – 28.06.2012

<http://www.math.bas.bg/ACA2012/>

The ACA series of conferences is devoted to promoting the growing applications of computer algebra in science, engineering and education. They provide a forum for researchers, developers and users of computer algebra algorithms and systems, and for anyone interested in computer algebra applications.

6. **ANTS-X – Tenth Algorithmic Number Theory Symposium**

University of California, San Diego, USA,
9. – 13.07.2012

<http://math.ucsd.edu/~kedlaya/ants10/>

As at previous ANTS conferences, the program will include several invited addresses, a greater number of contributed lectures, a poster session, a rump session, and a conference banquet. There will be a proceedings volume published by Springer-Verlag.

7. **CICM 2012 – Conferences on Intelligent Computer Mathematics**

Jacobs University, Bremen, 9. – 14.07.2012

<http://www.informatik.uni-bremen.de/cicm2012/cicm.php>

As computers and communications technology advance, greater opportunities arise for intelligent mathematical computation. While computer algebra, automated deduction, mathematical publishing and novel user interfaces individually have long and successful histories, we are now seeing increasing opportunities for synergy among these areas.

8. **TIME 2012 – Technology and its Integration in Mathematics Education**

Tartu, Estonia, 10. – 14.07.2012

<http://time2012.ut.ee/>

In 1992 ACDCA (the Austrian Center for Didactics of Computer Algebra) started a conference series which has become a driving force in bringing technology, in particular computer algebra systems (CAS), into the classroom.

The conference series comprises two strands: the ACDCA Summer Academies, which are more oriented towards didactical questions connected with the use of technology for teaching and learning and the conferences for CAS in Education and Research, which are geared towards exploring the use of CAS software and symbolic calculators in education and towards using these tools in programming and research.

TIME 2012 is a 20-Years' Celebration of this Conference Series.

9. **SCC 2012 – Third international conference on Symbolic Computation and Cryptography**

Castro Urdiales, Spain, 11. – 13.07.2012

<http://scc2012.unican.es>

The third international conference on Symbolic Computation and Cryptography (SCC 2012) will take place at International Centre for Mathematical meetings (CIEM), Castro Urdiales, on 11-13 July 2012. The SCC 2012 conference is co-located with third Workshop on Mathematical Cryptology (WMC 2012), an event also organized by research group Algorithmic Mathematics And Cryptography (AMAC), which will be held on 9-11 July 2012.

SCC 2012 is the third edition of a new series of conferences, which have been established in response to the growing interest in applying and developing methods, techniques, and software tools of symbolic computation for cryptography. The first conference (SCC 2008) was held in Beijing, China, in April 2008 and the second one (SCC 2010) was held in Egham, UK, in June 2010.

SCC 2012 aims at providing an interactive forum for researchers to present recent results, exchange ideas, and learn and discuss the latest developments and emerging problems in the area of symbolic computation and cryptography. Typical areas of interest include: design, modeling, and analysis of cryptographic systems and protocols for which symbolic computation may be used or needed; design, implementation, and analysis of algorithms and software tools of symbolic computation that may have potential applications in cryptography.

10. **WAIFI 2012 – International Workshop on the Arithmetic of Finite Fields**

Bochum, 16. – 19.07.2012

<http://waifi.org/>

This workshop is a forum of mathematicians, computer scientists, engineers and physicists performing research on finite field arithmetic, interested in communicating the advances in the theory, applications, and implementations of finite fields. The workshop will help to bridge the gap between the mathematical theory of finite fields and their hardware/software implementations and technical applications.

11. ISSAC 2012 – International Symposium on Symbolic and Algebraic Computation

Grenoble, France, 22. – 25.07.2012

<http://www.issac-conference.org/2012>

The International Symposium on Symbolic and Algebraic Computation (ISSAC) is the premier conference for research in symbolic computation and computer algebra. ISSAC 2012 is the 37th meeting in the series, started in 1966 and held annually since 1981, in North America, Europe and Asia. The conference presents a range of invited speakers, tutorials, poster sessions, software demonstrations and vendor exhibits with a centerpiece of contributed research papers.

12. CASC 2012 – 14th International Workshop on Computer Algebra in Scientific Computing

Maribor, Slovenia, 3. – 6.09.2012

<http://www14.in.tum.de/CASC2012/>

The methods of Scientific Computing play an important role in the natural sciences and engineering. Significance and impact of computer algebra methods and computer algebra systems for scientific computing has increased considerably over the last decade. Nowadays, computer algebra systems such as CoCoA, Macaulay, Magma, Maple, Mathematica, Maxima, Reduce, Singular and others enable their users to exploit their powerful facilities in symbolic manipulation, numerical computation and visualization. The ongoing development of computer algebra systems, including their integration and adaptation to modern software environments, puts them to the forefront in scientific computing and enables the practical solution of many complex applied problems in the domains of natural sciences and engineering.

The topics addressed in the workshop cover all the basic areas of scientific computing as they benefit from the application of computer algebra methods and software.

The 14th International Workshop on Computer Algebra in Scientific Computing (CASC'2012) will be held in Maribor, Slovenia, from September 3 to 6, 2012. The Local Arrangements Chair is Valery Romanovski.

13. Informatik 2012 – Jahrestagung der GI

TU Braunschweig, 16. – 21.09.2012

<http://www.informatik2012.de>

Auf der ersten gemeinsamen Tagung von GI und GMDS vom 16.09.2012 bis zum 21.09.2012 werden unter dem Leitthema "Was bewegt uns in der Zukunft? Neue Lebenswelten in der Informationsgesellschaft" Workshops, wissenschaftliche Sitzungen, Plenarveranstaltungen, Tutorien und studentische Veranstaltungen angeboten. Führende Personen aus

Wissenschaft, Politik und Praxis geben einen Überblick über die aktuellsten Entwicklungen rund um das Leitthema der Tagung sowie über weitere aktuelle Forschungsergebnisse aus den durch die GI und die GMDS vertretenen Fachgebieten.

Tagungsleitung: Prof. Dr. Lars Wolf

14. Jahrestagung der DMV

Universität des Saarlandes, 17. – 20.09.2012

<http://www.math.uni-sb.de/dmv/>

Im Jahr 2012 findet die Jahrestagung der DMV in Saarbrücken statt. Zu den Hauptvortragenden gehören Wolfram Decker (TU Kaiserslautern), Ilia Itenberg (Université Pierre et Marie Curie, Paris), Chandrashekar Khare (UCLA), Mila Nikolova (ENS Cachan), Dimitri Shlyakhtenko (UCLA), Martin Schweizer (ETH Zürich), Endre Süli (University of Oxford), Nina Uraltseva (St. Petersburg State University). Die Emmy-Noether-Vorlesung wird von Anna Wienhard (Princeton University) gehalten.

