Daily News 每日新闻

International Congress of Mathematicians — Monday, August 26, 2002 – No. 6

The Abel Prize

A statue of Abel in Oslo.

An annual prize for lifetime achievement in mathematics.

On August 23, 2001 the Norwegian Prime Minister Jens Stoltenberg proposed the establishment of a Niels Henrik Abel Memorial Fund, of 200,000,000 NOK (22 million USD), with the purpose of creating an international prize for outstanding scientific work in the field of mathematics, a mathematical prize equivalent to the Nobel Prize, honoring the Bicentennial of Niels Henrik Abel, 2002.

The Prime Minister expressed his motives for this proposal in the following way:

The Norwegian Government is working to focus more on mathematics and science than has been the case in recent years. The establishment of the Abel Prize is hoped to have several positive effects: increased interest among young people for the study of science, strengthening the country's research in the field of mathematics, increased awareness of Norway as a country of knowledge and learning.

The proposal was upheld by the new Government of Kjell Magne Bondevik and voted by the Norwegian Parliament in January 2002.

The annual return of the capital is allocated to the Norwegian Academy of Science and Letters, which will award the prize on the recommendation of an Abel committee, formed by 5(five) outstanding mathematicians, 1(one) proposed by the EMS, 3(three) proposed by the IMU, and one Norwegian.

The first prize will be awarded in June 2003, in Oslo and will include a cash prize of between 5 and 6 million NOK (800, 000 USD).

Nominations for the prize 2003 should be addressed to the Norwegian Academy of Science and Letters before November 15, 2002.

Consult the web-page: `www.math.uio.mo/abel`

O. A. Laudal

Editorial Change in the *Abstracts of Plenary and Invited Lectures*

On Page 115 in the *Abstracts of Plenary and Invited Lectures*, the abstract of Bernold Fiedler (from Line 8 to Line 15) should be replaced by the following:

ABSTRACT

Bifurcation theory studies dynamical systems depending on one or several real parameters. Frequently, trivial equilibria or fixed points x=0 are assumed to exist. The constant

parameter provides a trivial foliation, transverse to these equilibria.
In contrast, we consider vector fields with lines and planes of trivial equilibria in absence of any parameters. We address failure of normal hyperbolicity, due to transverse zero or purely imaginary eigenvalues. In particular we indicate the resulting dissipative Hopf and Takens-Bogdanov bifurcations, along with some reversible and integrable variants, in absence of parameters.
We illustrate our results by dynamic uncouplings of coupled oscillators, oscillatory viscous shock profiles of stiff nonlinear hyperbolic balance laws, and spatially non-periodic stationary waves in the Kolmogorov problem of fluid flows in planar channels.
The results are joint work with Stefan Liebscher.

MR/2bl reception: There will be a reception for reviewers and friends of Mathematical Reviews and Zentralblatt MATH on Aug. 26, 18:00-19:30, Asia Western Restaurant, Continental Grand Hotel.

Scientific Program – Changes

Correction for Daily News No. 5

The Informal Meeting of India Mathematicians will be held at 20:45 (8:45PM) August 26.

Correction:

Elena Tchernykh's affilication is *Moscow State University, Russia.*

3. Number Theory

Short Talk: Tianze, *Small solutions of quadratic equations with prime variables in arithmetic progressions*, From Aug. 27, 18:05–18:20, Wang, R5015 ⇒ Aug. 27, 16:45–17:00, R5015.

Short Talk: Adamczewski, Boris *Arithmetical and combinatiorial properties of irrational rotations*, From Aug. 27, 17:20–17:35, R5015 ⇒ Aug. 27, 17:00–17:15, R5015.

7. Lie Groups and Representation Theory

Short Talk: Strauch, Matthias, *Cuspidal locally analytic representations*, Aug. 26, 16:45–17:00, R3058 ⇒ Aug. 26, 18:05–18:20, R3058.

11. Partial Differential Equations

Short Talk: Wen Guo Chun will replace Chen, Dechang to give the talk. Aug. 26, 15:15, R3018.

16. Numerical Analysis and Scientific Computing

Title Changed: Liu, Biyue, *A Numerical Study of Viscous Flows in curved Tubes with Atherosclerotic Plaques*, Aug. 26, 14:10-14:25, R5019.

Cancellation

2. Algebra

Short Talk: Aug. **26**, 17:00–17:15, Zhang, Jiangfeng, *Note on the computation of Noetherian normalization*, R5018.

4. Differential Geometry

Short Talk: Aug. **27**, 14:25–14:40, Gong, Jianhua *On quasiconformally homogeneous manifolds in space*, CH14.

Short Talk: Aug. **26**, 16:45–17:00, Karpunin, Grigory, *Minimal networks and combinatorial Morse theory*, R3051.

Short Talk: Aug. **26**, 15:15–15:30, Pan, Jianzhong, *A generalized intersection theorem*, R3051.

Short Talk: Aug. **26**, 15:15–15:30, Moghaddamfar, Ali Reza *A characterizaton of the groups $PGL_2(p)$, p prime, $5 < p < 100$*, R3051.

8. Real and Complex Analysis

Short Talk: Aug. **26**, 16:15–16:30, Zorii, Natalia, *Variational problems in the theory of potentials in locally compact spaces*, R5017.

9. Operator Algebras and Functional Analysis

Short Talk: Aug. **27**, 14:25–14:40, Li, Yangrong, *Contraction integrated semigroups and their applications to continuous-time Markov chains*, R3051.

10. Probability and Statistics

Short Talk: Aug. **27**, 13:55–14:10, Sun, Liuquan, *Regression analysis for a semi-parametric model with panel data*, R5020.

13. Mathematical Physics

Short Talk: Aug. **26**, 17:20–17:35, Fan, Engui, *A family of completely integrable multi-Hamiltonian structure systems explicitly related to some celebrated equations*, CH13.

16. Numerical Analysis and Scientific Computing

Short Talk: Aug. **27**, 13:55–14:10, Zhang, Shugong *Algebraic interpolation on manifold and the instability of the interpolation nodes*, R5023.

ad-hoc Talks and Posters

2. Algebra

Short Talk: csörgö, Piroska (Eötuös University, Hungary), *On loops and groups* Aug. 26, 17:00–17:15, R5018.

Short Talk: Vámos, P. (Unversity of Exeter, United Kingdom), *Matrix type of rings*, Aug. 27, 15:30–15:45, R3058.

4. Differential Geometry

Short Talk: Mendonca, Sergio (UFF, Brazil), *A connectedness principle in the geometry of positice curvature*, Aug. 26, 17:00-17:15, R3051.

Short Talk: Piccione, Paolo (Universidade de So Paulo, Brazil), *Group valued maps and a construction of the Maslov index for Lagrangian paths in infinite dimension*, Aug. 27, 14:25–14:40, CH14.

5. Topology

Short Talk: Skopenkov, Arkadiy (Moscow State University, Russia), *The Whitehead torus, the Hudson-Habegger invariant and classification of embeddings of 4-manifolds into* R^7, Aug. 27, 18:05–18:20, R3030.

Short Talk: Elena, Koudriavtseva (Moscow State university, Russian), *Wecken property for roots of mapping between surfaces*, Aug. 27, 14:25–14:40, R3030.

6. Algebraic and Complex Geometry

Short Talk: Nieto, Isidro (Instituto de fisica y matematicas, Universidad Michoacana, Mexico), *Visualization of real quartic surfaces containing 16 skew lines*, Aug. 27, 17:00–17:15, CH14.

8. Real and Complex Analysis

Short Talk: Singh, Anand Prakash (University of Jammu, India), *Sharing values and normality of meromorphic functions*, Aug. 27, 17:00–17:15, CH03.

9. Operator Algebras and Functional Analysis

Short Talk: Mabizela, Sizwe G. (University of Cape Town, South Africa), *Hausdorff Lipschitz continuity of the simultaneous best approximation operator*, Aug. 26, 18:05–18:20, R5019.

Short Talk: Wu, Shuhong (Wuhan University, China), *A property of numerical range of operators*, Aug. 27, 15:15–15:30, R3051.

11. Partial Differential Equations

Short Talk: Mshimba, Ali Seif (University of dar es Salaam, Tanzania), *The generalized Riemann-Hilbert boundary value problem with piece-wise continuous boundary data for polyanalytic function of order n in weighted Sobolev space* $W_{n,p}(D, d^{\mu}(z))$, Aug. 27, 14:45–15:00, R5016.

Short Talk: Yang, Xiaozhou, (Shantou University, China), *On Global Solutions and Elementary Waves of Multi-dimensional Conservation Laws*, Aug. 27, 15:30–15:45, R5014.

12. Ordinary Differential Equations and Dynamical Systems

Short Talk: Mestel, B. (Exeter Univ., UK), *Renormalisation in quasiperidically driven quantum systems*, Aug. 27, 14:25–14:40, R5020.

Short Talk: Panakhov, E. and Unal IC (Firat University, Turkey), *On the inverse problem for Dirac system*, Aug. 27, 15:30–15:45,R5020.

13. Mathematical Physics

Short Talk: Shepelsky, Dmitry (Institute for Low Temperature Physics, Ukraine), *The modified KdV equation on the half-line*, Aug. 26, 17:20–17:35, CH13.

14. Combinatorics

Short Talk: Bau, Sheng (University of Natal, South Africa), *On Cycles in Regular Graphs*, Aug. 27, 17:00–17:15, R5021.

17. Applications of Mathematics in the Sciences

Short Talk: Ma, Wanbiao (University of Science and Technology, China), *Dynamical properties of SIR epidemic model with time delay*, Aug. 26, 16:45–17:00, CH14.

18. Mathematics Education and Popularization of Mathematics

Short Talk: Hirahata, Hirotoshi (Kagawaken Otemae Takamatsu High School, Japan), *Our activities at math group (MSG) for high school teachers in Kagawa*, Aug. 27, 17:00–17:15, R3058.

Short Talk: Zimmermann, Bernud (University of Jena, Germany), *On Heuristics in Ancient Arabic and Chinese Mathematics and use in textbooks*, Aug. 27, 18:05–18:20, R3058.

19. History of Mathematics

Short Talk: Annie, Han (The City University of New York – BMCC, USA), *Teaching college statistics with techonolog*, Aug. 26, 17:15–17:30, R5014.

Informal Seminar on Matrix Problems

Aug. **26**, 17:15–18:00, R5016, Zhang, Yingbo, *On hom-spaces of tame algebras.*

Aug. **27**, 16:15–17:00, R5014, Roiter, A. *Representations of Marked quivers.*

An Ancient Chinese Paradox

"A person from the State of Chu sold both shield and spear. Firstly, he praised his shield that 'my shield is very hard, no spear can pierce it through.' Then, he talked about his spear that 'my spear is very sharp, no object it can not pierce through.' 'How about using your spear to pierce your own shield?' Exclaimed an audience. The person was unable to reply."

—— A fable from the work HanFei Zi (about 280BC–233BC)

Daily News of the International Congress of Mathematicians, August 20–28, 2002, Beijing, China	*Editor in Chief*: Wenlin Li *Editors*: Qi Feng, Shirong Guo, Yafen Jin, Huimin Weng, Huijuan Wang, Qixiao Ye	*English Consultant*: Joseph C.Y. Chen *Latex Support*: Jinrong Wu