International Congress of Mathematicians
ICM 2010
Hyderabad, India

Programme

Thursday, August 19, 2010  Day 1

09:30-12:30  Opening Ceremony  Halls 3 & 4
Award of Fields Medals, and the
Nevanlinna, Gauss and Chern Prizes

12:30-14:00 Lunch

14:00-16:30  Laudations  Hall 4
Chair: J. Palis Junior

14:00-14:25 H. Furstenberg  
On the work of Fields Medallist
Elon Lindenstrauss

14:30-14:55 J. Arthur  
On the work of Fields medallist
Ngo Bao Chau

15:00-15:25 H. Kesten  
On the work of Fields Medallist
Stanislav Smirnov

15:30-15:55 H-T. Yau  
On the work of Fields Medallist
Cedric Villani

16:00-16:25 G. Kalai  
On the work of
Nevanlinna Prize Winner
Daniel Spielman

16:45-17:45  Abel Lecture  Hall 4
S. R. S. Varadhan  
Large Deviations
Chair: K. R. Parthasarathy
09:30-12:30 Event connected to the Gauss and Chern Prizes
Chair: L. Lovasz,
President, IMU
09:30-09:35 Welcome by President, IMU
09:35-09:45 Greetings from Prof. J. Simons (on video)
09:45-10:05 Ms. May Chu
*Prof. Chern - Reminiscences*
10:05-10:35 Robert Bryant
*S. S.Chern - His mathematics*
10:35-11:20 Lecture on the work of L. Nirenberg,
the Chern Prize winner
Yanyan Li
11:20-11:45 Coffee Break
11:45-12:30 Lecture on the work of Y. Meyer,
the Gauss Prize winner
I. Daubechies
12:30-13:45 Lunch
13:45-14:45 Special Lecture by Fields Medallist Stanislav Smirnov
*Discrete complex analysis and probability*
Chair: H. Kesten
15:00-18:00 Invited Talks, Panel Discussion and Short Communications in Parallel Sessions
18:00-19:30 Dance Programme
20:00 Conference Dinner
09:00-10:00  Plenary Lecture 1  
**Artur Avila**  
*Dynamics of renormalization operators*  
*Chair: E. Ghys*  

10:15-11:15  Plenary Lecture 3  
**Irit Dinur**  
*Probabilistically checkable proofs and codes*  
*Chair: H. Lenstra*  

11:30-12:30  Plenary Lecture 3  
**Carlos Kenig**  
*The global behaviour of solutions to critical nonlinear dispersive equations*  
*Chair: J. Ball*  

12:30-13:45  Lunch  

13:45-14:45  Special Lecture by  
Nevanlinna Prize Winner  
**Daniel Spielman**  
*Algorithms, graph theory and linear equations in Laplacian matrices*  
*Chair: G. Kalai*  

15:00-18:00  Invited Talks, Poster Sessions and Short Communications in Parallel Sessions  

18:00-20:00  Panel Discussion:  
**Pipeline Report**
Sunday, August 22, 2010

09:00-10:00 Plenary Lecture 4  
**David Aldous**  
*Exchangeability and continuum limits of discrete random structures*  
Chair: Z-M. Ma

10:15-11:15 Plenary Lecture 5  
**R. Parimala**  
*Arithmetic of linear algebraic groups over two-dimensional fields*  
Chair: S. Ramanan

12:30-13:45 Lunch

13:45-14:45 Special Lecture by Fields Medallist  
**Ngo Bao Chau**  
*Endoscopy of automorphic forms*  
Chair: J. Arthur

15:00-18:00 Invited Talks, Panel Discussion and Short Communications in Parallel Sessions

18:00-19:00 Short Communications in Parallel Sessions
Monday, August 23, 2010  
Free Day

Tuesday, August 24, 2010  

09:00-10:00  
Plenary Lecture 7  
A. N. Parshin  
*Representations of higher adelic groups and arithmetics*  
Chair: M. S. Narasimhan  

10:15-11:15  
Plenary Lecture 8  
Jean-Michel Coron  
*On the controllability of nonlinear partial differential equations*  
Chair: L. Nirenberg  

11:30-12:30  
Plenary Lecture 9  
Shige Peng  
*Backward stochastic differential equations, nonlinear expectations and their applications*  
Chair: S. R. S. Varadhan  

12:30-13:45  
Lunch  

13:45-14:45  
Special Lecture by Fields Medallist  
Cedric Villani  
*Interacting particle systems and Landau damping*  
Chair: E. Ghys  

15:00-18:00  
Invited Talks and Short Communications in Parallel Sessions  

18:00-20:00  
Short Communications in Parallel Sessions
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<td>09:00-10:00</td>
<td>Plenary Lecture 10</td>
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<td><strong>Stanley Osher</strong></td>
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<td><em>New algorithms in image science</em></td>
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<td><em>Chair: M. F. Wheeler</em></td>
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<td>10:15-11:15</td>
<td>Plenary Lecture 11</td>
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<td><strong>Nicolai Reshetikhin</strong></td>
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<td><em>Mathematics of quantum field theory</em></td>
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<td><em>Chair: H. Araki</em></td>
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<td>11:30-12:30</td>
<td>Plenary Lecture 12</td>
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<td><strong>Claire Voisin</strong></td>
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<td><em>On the cohomology of algebraic varieties</em></td>
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<td><em>Chair: V. B. Mehta</em></td>
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<td>12:30-13:45</td>
<td>Lunch</td>
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<td>13:45-14:45</td>
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<td><strong>Elon Lindenstaruss</strong></td>
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<td><em>Equidistribution in homogeneous spaces and number theory</em></td>
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<td><em>Chair H. Furstenberg</em></td>
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<td>15:00-19:00</td>
<td>Invited Talks, Panel Discussion and Short Communications in Parallel Sessions</td>
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<td>19:00</td>
<td><strong>Concert</strong></td>
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Thursday, August 26, 2010

09:00-10:00 Plenary Lecture 13
Thomas J. R. Hughes
Isogeometric analysis
Chair: R. Jeltsch

10:15-11:15 Plenary Lecture 14
Peter Jones
Eigenfunctions and coordinate systems on manifolds
Chair: I. Daubechies

11:30-12:30 Plenary Lecture 15
Kim Plofker
Indian rules, Yavana rules: foreign identity and the transmission of mathematics
Chair: Bill Casselman

12:30-13:45 Lunch

13:45-14:45 Plenary lecture 16
Hugh Woodin
Strong axioms of infinity and the search for V
Chair: J. Nesetril

15:00-18:00 Invited Talks and Short Communications in Parallel Sessions

18:00-20:00 Round Table:
Use of metrics in evaluating research

Hall 4
Friday, August 27, 2010

09:00-10:00  Plenary Lecture 17  Hall 4
Hillel Furstenberg
Ergodic structures and
non-conventional ergodic theorems
Chair: M. S. Raghunathan

10:15-11:15  Plenary Lecture 18  Hall 4
R. Balasubramanian
Highly composite
Chair: J-M. Deshouillers

11:30-12:30  Plenary Lecture 19  Hall 4
Richard Schoen
Riemannian manifolds of
positive curvature
Chair: M. de Leon

12:30-13:45  Lunch

13:45-14:45  Emmy Noether Lecture  Hall 4
Idun Reiten
Cluster categories
Chair: C. Voisin

15:00-18:00  Invited Talks
and Short Communications
in Parallel Sessions

18:00  Closing Ceremony  Hall 4