

4.3 THE MATHEMATICS OF ENNIO DE GIORGI S.N.S. PISA, OCTOBER 24–27, 2001

Lo scopo del Convegno era duplice: illustrare l'ampio spettro degli interessi e dell'attività scientifica di De Giorgi ed esporre risultati collegati alla sua opera, ottenuti da matematici sparsi nel mondo.

Riportiamo il programma del Convegno

PROGRAM

October 24.

9.00 – 9.10 OPENING ADDRESS.

9.10 – 9.20 S. SETTIS, Direttore Scuola Normale Superiore

9.20 – 9.30 A. LEACI, Direttore Dipartimento di Matematica “Ennio De Giorgi”

9.30 – 11.00 M. MIRANDA: “Plateau’s problem and the minimal surface equation”

11.00 – 11.20 coffe break

11.20 – 12.50 S. SPAGNOLO: “The contribution of De Giorgi to non-elliptic PDE’s: non-uniqueness examples, Cauchy problem in Gevrey classes and surjectivity on the analytic functions”

Afternoon session

15.00 – 15.55 F. MORGAN: “Area-minimizing surfaces in ambients with singularities”

16.00 – 16.55 B. FRANCHI: “Perimeter and rectifiability in step 2 Carnot groups”

16.55 – 17.15 coffe break

17.15 – 18.10 F. HONSELL: “Virtuous circles”

October 25.

9.00 – 10.30 M. FORTI: “The Foundational Programme of Ennio De Giorgi”

10.30 – 10.45 coffe break

10.45 – 11.40 I. FONSECA: “Higher order variational problems”

11.45 – 12.40 G. BUTTAZZO: “Shape optimization and mass transportation theory”

Afternoon session

15.00 – 15.55 H. BREZIS: “New questions and new results on Sobolev spaces”

16.00 – 16.55 G. ALBERTI: “Jacobians of S^k -valued maps”

16.55 – 17.15 coffe break

17.15 – 18.10 G. BELLETTINI: *Some remarks on barriers for differential equations*”

October 26.

9.00 – 10.30 E. GIUSTI: *“The contribution of De Giorgi to the regularity theory for elliptic PDE’s”*

10.30 – 10.45 coffe break

10.45 – 11.40 U. MOSCO: *“On the metric roots of De Giorgi–Nash–Moser’s theory”*

11.45 – 12.40 S. MÜLLER: *“Elliptic and parabolic systems with nowhere smooth solutions”*

Afternoon session

15.00 – 15.55 G. LONGO: *“The foundation of Mathematics as interaction with other sciences, reflections relating to and departing from De Giorgi’s foundational approach”*

16.00 – 16.55 A. BRAIDES: *The construction of asymptotic theories by Γ -convergence”*

16.55 – 17.15 coffe break

17.15 – 18.10 F. TREVES: *“On the analiticity of solutions of linear PDE”*

October 27.

9.00 – 10.30 G. DAL MASO: *“The early developments of Γ -convergence”*

10.30 – 10.45 coffe break

10.45 – 11.40 D. KINDERLEHRER: *A Markov chain paradigm for the brownian motor and its consequences”*.

The Mathematics of Ennio De Giorgi

Scuola Normale Superiore di Pisa
 October 24/27, 2001

$$\sum \frac{\partial}{\partial x_n} \left(a_{nk} \frac{\partial u}{\partial x_k} \right) = f$$



The aim of the workshop is, on the one hand, to show the whole range of De Giorgi's scientific activity and, on the other hand, to present contemporary mathematical results in some way connected to his work. To this aim 5 general historical lectures will be delivered by G. Dal Maso (G-convergence and Γ -convergence), M. Forti (Foundations of Mathematics), E. Giusti (Regularity Theory), M. Miranda (Minimal Surfaces), S. Spagnolo (Partial Differential Equations). The meeting is also sponsored by the MURST National Research Project "Calcolo delle Variazioni".

Speakers

- | | | |
|------------|---------------|-----------------|
| G. Alberti | G. Bellettini | A. Braides |
| H. Brezis | G. Buttazzo | I. Fonseca |
| B. Franchi | F. Honsell | D. Kinderlehrer |
| G. Longo | F. Morgan | U. Mosco |
| S. Müller | F. Trèves | |

$$\forall f \exists g \forall a \in \text{Dom } f \quad (g(a) = \{g(x) \mid x \in f(a) \cap A\} \cup (f(a) \setminus A))$$

Organizing Committee

Luigi Ambrosio, Gianni Dal Maso, Marco Forti,
 Antonio Leaci, Mario Miranda, Sergio Spagnolo

Registration

Registration is free but mandatory, for organizational purpose.
 The deadline for registrations is September 15, 2001.
 webpage: <http://cvgmt.sns.it/people/degiorgi/workshop>



SCUOLA NORMALE SUPERIORE
 PISA



DIPARTIMENTO DI MATEMATICA
 ENNIO DE GIORGI
 LECCE