CIEAEM 65

En l'honneur d'Emma Castelnuovo

Turin, Italie

22-26 juillet 2013

L'ENSEIGNEMENT DES MATHÉMATIQUES
DANS UN ENVIRONNEMENT GLOBALISÉ

In honour of Emma Castelnuovo

Turin, Italy

22-26 July 2013

MATHEMATICS EDUCATION
IN A GLOBALIZED ENVIRONMENT

UNIVERSITÀ DEGLI STUDI DI TORINO

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65 CIEAEM 65

Turin, Italy: July 22-26, 2013

PROGRAM

Monday 22
8:30 – 11:00 Registration
11:00- 12:00 Opening Ceremony
12:00-13:00 *Plenary 1 (P.Appelbaum, S.Gerofsky)*
13:00 *Welcome reception*
14:30-17:00 Special Session in honour of Emma Castelnuovo: *Revisiting Emma's contribution to Mathematics Education in today's world* **20:00** Dinner "Primi Italiani" (optional)*

Tuesday 23
9:00- 11:00 *Plenary 2 (G.FitzSimons)* *Plenary 3(G. Vergnaud)*
11:00-11:30 *Coffee break*
11:30- 13:00 *WG Session 1*
13:00- 14:30 *Lunch*
14:30- 15:30 *Meeting with Plenary Speakers* ***15:30-17:30*** *WG Session 2* ***17:30-18:30*** *Workshops* ***20:00*** *Dinner "Cena Piemontese" (optional)**

65 CIEAEM 65

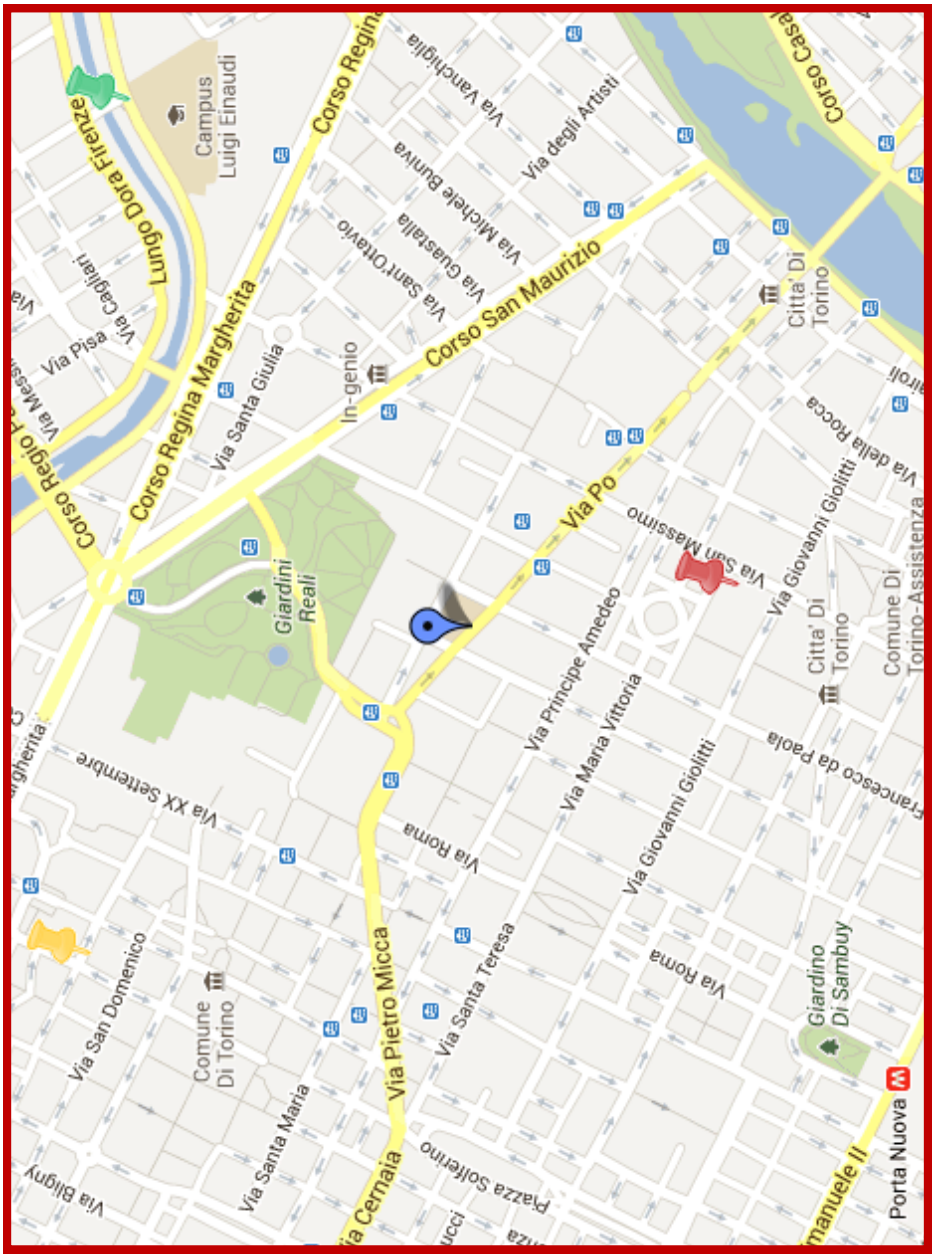
Turin, Italie 22-26 juillet 2013

PROGRAMME

Wednesday 24
9:00-10:00 *Plenary 4 (E.Ch.Wittmann)*
10:00-10:30 *Coffee Break*
10:30-13:00 *WG Session 3*
13:00- 14:30 *Lunch*
15:30 *Excursion*

Thursday 25
9:00-10:00 *Plenary 5 (N.Gorgorio)*
10:00-10:30 *Coffee Break*
10:30-13:00 *WG Session 4*
13:00- 14:30 *Lunch*
14:30- 15:30 *Meeting with Plenary Speakers*
15:30-17:30 *FORUM of Ideas*
17:30-18:30 *Workshops*
20:30 *Social dinner*

Friday 26
9:00-10:00 *Plenary 6 (F.Favilli)*
10:00- 11:00 *Report of WG*
11:00-12:00 *Round Table "Reflections on the Conference"*
12:00 *Closing Ceremony and Farewell Cocktail*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Università degli Studi di Torino
Via Po, 17

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Via Giolitti, 36

A Università degli Studi di Torino, Via Po, 17

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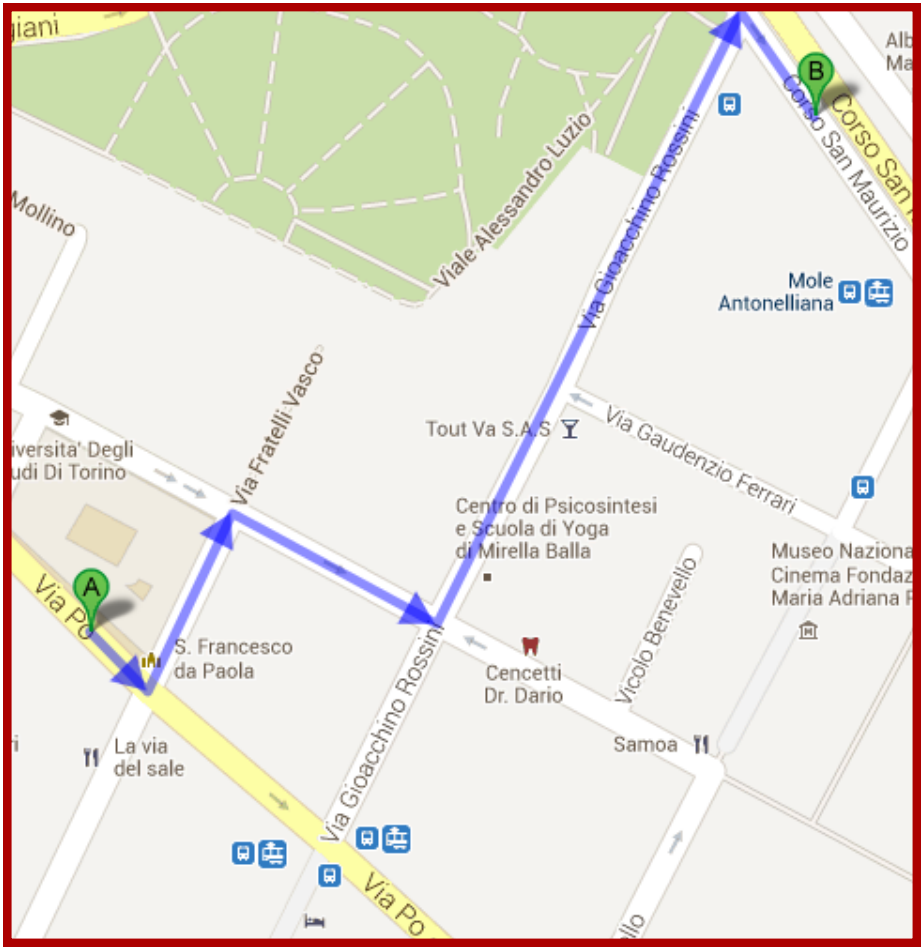

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Program day by day

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Programme Jour par jour

Monday July 22, 2013

Università degli Studi di Torino, Via Po, 17

8:30-11:00 Registration >< Inscription

11:00-12:00 (Aula Magna)

Opening ceremony >< Cérémonie d'ouverture

12:00-13:00 (Aula Magna)

Peter Appelbaum, Susan Gerofsky (United States of America)

Performing alter-mathematical-globalization

><

La performance de l'altermondialisme mathématique

13:00 Welcome reception >< Réception de bienvenue

Special Session in honour of Emma Castelnuovo:
Session spéciale en l'honneur de Emma Castelnuovo:

Revisiting Emma's contribution to Mathematics Education in today's world
Revisiter la contribution d'Emma pour l'enseignement des mathématiques dans le monde d'aujourd'hui

Aula Magna
Università di Torino,
Via Po, 17

14:30 "Emma Castelnuovo: l'espace, le temps et les influences d'une vie devouée à l'enseignement des mathématiques". *Erika Luciano,* Università di Torino

14:50 Revolutionary aspects and actuality in the teaching of Emma Castelnuovo, "digital translation" with a DGS (dynamic geometry software) of her didactic material, and possible developments for high school and university, *Mario Barra*, Università "La Sapienza", Roma

15:50 Emma Castelnuovo et son engagement pour une école sans frontières *Nicoletta Lanciano,* Università "La Sapienza", Roma

16:30 Mathematics and art in the city of Turin

> <

Mathématiques et Art dans la ville de Turin

M. Cantoni, E. Gallo, A Sargenti, C. Testa - "La Casa degli Insegnanti" - Torino

17:00 **Thanks and greetings to Emma.**

20:00 Dinner (optional) > < diner (optionnel)

"Primi Italiani"

(ITS "A. Avogadro", Corso San Maurizio, 8, Torino)

Tuesday, July 23, 2013

Università degli Studi di Torino, Via Po, 17

9:00-10:00 (Aula Magna)
Gail FitzSimons (Australia)
Mathematics in and for work in a globalised environment
> <
Les mathématiques dans et pour le travail dans un environnement mondialisé

10:00-11:00 (Aula Magna) *Gerard Vergnaud* (France)
The analysis of competences and activity in situations; why and how?
> <
Pourquoi et comment analyser l'activité en situation et les compétences?

11:00-11:30 Coffee break > <Pause café

11:30-13:00 Working Groups > <Groupes de travail

Session 1

WG 1 (Aula Magna) Knowledge and competences > <Savoirs et compétences
Gail FitzSimons, Corneille Kazadi: *ANIMATORS*
Stefania Pozio Maths proficiency test: Analysis Italian scores in the OCSE-PISA 2003 survey.
Jorge Soto Andrade, Pamela REYES-SANTANDER L'enseignement des mathématiques à l'ère de la mondialisation.
WG 2 (Aula Bianca) Teacher training: What are the challenges in the face of globalisation? > <Formation des enseignants : Quels défis face à la globalisation ?

Mireille Saboya, Javier Diez-Palomar: ANIMATORS
Maria Tichá, Alena Hospesova Problem posing as a motivational tool in improving primary school teacher knowledge.
Lina Fonseca, Elisabete Cunha Teacher training in geometry: creativity and entrepreneurship

WG 3 (Aula Rossa) Reports of mathematics classroom practice > <Rapports sur la pratique dans la classe de mathématiques.

Marina Ascari, Sixto Romero: ANIMATORS
Marie-Pier Morin, Laurent Theis, Abdelkrim Hasni, Lisane Boisclair L'accompagnement d'enseignants du primaire pour favoriser l'interrelation entre les mathématiques, les sciences et les technologies (MST).
Marina De Simone, Francesca Ferrara Roots of algebraic thinking in young students: an exploratory study.

WG 4 (Aula Verde) TIC Globalisation and mathematics education > <TIC, mondialisation et éducation mathématique

Gilles Aldon, François Kalabasis: ANIMATORS
Maria Elisabette Brisola Brito Prado, Rua Rafael Saglioni, Nielce Meneguelo Lobo da Costa, Maria Elisa Esteves Lopes Galvão Teacher development for the integrated use of technologies in mathematics teaching
Daniela Ferrarello, Maria Flavia Mammana, Mario Pennisi Teaching by doing

WG 5 (Aula Principe d'Acaia) Multiculturalism and teaching/learning mathematics > <Multiculturalisme et enseignement apprentissage des mathématiques.

Françoise Cerquetti, Benedetto Di Paola: ANIMATORS
Elena Scalenghe Le développement des compétences mathématiques des futurs enseignants par les stages à l'étranger.

13:00-14:30 Lunch > <Déjeuner

14:30-15:30 Meeting with plenary speakers > <

Rencontre avec les conférenciers

Peter Appelbaum, Susan Gerofsky, Gail FitzSimons, Gerard Vergnaud

15:30-17:30 Working groups > < Groupes de travail

Session 2

WG 1 (Aula Magna)

Teresa Pimentel, Isabel Vale Reasoning in Geometry at secondary level: An exploratory study.

Fernando Hitt, Mireille Saboya, Carlos Corté Structure cognitive de contrôle et compétences mathématiques chez les élèves du secondaire : les nombres polygonaux.

Roberta Pompili Towards a characterization of explanations in mathematics textbooks.

WG 2 (Aula Bianca)

Angélica da Fontoura Garcia Silva, Tania Maria Mendoça Campos, Ruy Cesar Pietropaolo An investigation about teaching professional knowledge of teachers who teach Mathematics

Maria Polo Généralité et spécificité dans la formation des enseignants de mathématiques: le cas de la formation continue

Cristina Coppola, Pietro Di Martino e alii Primary teachers' beliefs and emotional disposition towards mathematics and its teaching.

Audrey Cooke, Chris Hurst Relationships between mathematics anxiety, confidence to teach mathematics, and attitudes towards mathematics in pre-service teachers.

WG 3 (Aula Rossa)

Miriam Amit, Talya Gilat Introducing classroom modeling practice to promote creativity and multiculturalism

Antonella Montone, Eleonora Faggiano, Annamaria Troccoli Mathematics as a way of being familiar with the territory.

WG 4 (Aula Verde)

Andreas Moutsios-Rentzos, François Kalavasis, Emmanouil Sofos The mathematics classroom in the expanded open system of a globalised virtual social network

Maria Celia Pimentel de Carvalho, Nielce Meneguelo Lobo da Costa, Tania Maria Mendonça Campos Technology applied to the teaching of mathematics: lesson Analysis.

Reda Abu-Elwan Using GeoGebra environment in supporting prospective teachers on developing algebraic problem posing skills.

Giovannina Albano, Cristina Coppola, Tiziana Pacelli The use of e-learning in pre-service teachers' training.

WG 5 (Aula Principe d'Acaia)

Alessandro Ranploud, Benedetto Di Paola The chinese perspective of variation to rethink the italian approach to word-problems from a pre-algebraic point of view.
Domingos Dias, Cecília Costa, Pedro Palhares Ethnomathematics of the southwestern Angola Nyaneka-nkhumbi ethnic group and its application to mathematics education.

17:30-18:30 Workshops > < Ateliers

Session 1

Simone Banchelli, Francesca Martignone Working with pantographs for geometrical transformations.
Angela Pesci Mathematics Teachers' Training. Let's Begin From Their Personal Histories?
Ornella Robutti Dynamic representations with GeoGebra in teacher professional development.

20:00 Dinner (optional) > < Diner (optionnel)

"Cena Piemontese"

(ITS "A.Avogadro", Corso San Maurizio, 8, Torino)

Wednesday, July 24, 2013

Università degli Studi di Torino Via Po, 17

9:00-10:00 (Aula Magna)

Erich Ch. Wittmann (Germany)

Fundamental ideas of mathematics as the true source of teaching and learning

> <

Idées fondamentales des mathématiques comme la véritable source de l'enseignement et de l'apprentissage

10:00-10:30 Coffee break > < Pause café

10:30-13:00 Working groups **> <** Groupes de travail

Session 3

WG 1 (Aula Magna)

Isabel Vale, Teresa Pimentel From Problem Solving to creativity in mathematics.

Mireille Saboya, Stéphanie Rhéaume Compétence exercée dans la comparaison de fractions : quelle mobilisation les élèves font de leurs savoirs ?

Julie Cwikla and Jennifer Vonk Investigating the young mind and fractions.

WG 2 (Aula Bianca)

Aparecida Rodrigues, Silva Duarte, Angélica da Fontoura Garcia Silva, Tânia Maria Mendonça Campos The professional content knowledge for the division of fractions introduction.

Bernadette Dufour-Janvier, Mireille Saboya Quelles connaissances et compétences pour la formation des professeurs de mathématiques dans le traitement de situations de modélisation de phénomènes fonctionnels?

Javier Díez-Palomar Be a teacher in a global society: challenges and opportunities drawing on a sociological approach to mathematics teacher training

Paula Cardoso, Emma Mamede Teaching fractions – primary school teachers' difficulties on the quotient interpretation of fractions.

Alexandra Gomes, C.Miguel Ribeiro, alii Early years' trainee teachers' geometric knowledge: the case of defining a rectangle.

WG 3 (Aula Rossa)

Simone Banchelli, Francesca Martignone A dialogue about classroom tasks.
Ana Barbosa Mathematical reasoning: the impact of visual patterns.
Maria Carmela De Mitri, Adalberto Codetta Raiteri Common sense and teaching/ learning processes in two generations of students.
Chrysanthi Skoumpourdi Guess which: shapes' descriptions by toddlers.
Monica Panero Algebra and calculus encounter in secondary school: teachers' practices involving the concept of derivative.

WG 4 (Aula Verde)

Ana Serradó Bayés, La Salle-Buen Consejo, Maria Meletiou-Mavrotheris, Efi Paparistodemou Early statistics: a case study on in-service teachers' technological pedagogical content knowledge of statistics
Petronilla Bonissoni, Paolo Longoni, Gianstefano Riva, Ernesto Rottoli Nuages didactiques. CIEAEM et groupes de travail globaux et permanentes
Ferdinando Arzarello, Marcelo Bairral, Cristiano Danè, Iijima Yasuyukid Developing geometrical thinking using a touchscreen dynamic software
Veronika Havelková GeoGebra in teaching mathematics to upper primary pupils
Giovannina Albano, Eleonora Faggiano, Flavia Mammana A tetrahedron to model e -learning Mathematics.

WG 5 (Aula Principe d'Acaia)

Filipe Sousa, Pedro Palhares, Maria Luísa Oliveras Proportionality from Fishermen and Caulkers practices transposed into school activity.
Franco Favilli, Charoula Stathopoulou, Eleni Gana Language serves both as a means of representation and as a means of communication.
Ildar Safuanov Teaching abstract algebra in native language in Tatarstan.

13:00-14:30 Lunch><Déjeuner

14:30-15:30 (Aula Magna)

Royal Meeting><Rendez-Vous Royal

15:30 Excursion to><Excursion à

La Venaria Reale

Thursday, July 25, 2013

Università degli Studi di Torino, Via Po, 17

9:00-10:00 (Aula Magna)

Nuria Gorgorió (Spain)

Mathematics teachers' role as social resources in a globalized world

> <

Le rôle du professeur de mathématiques comme ressource sociale dans un monde globalisé

10:00-10:30 Coffee break > < Pause café

10:30-13:00 Working Groups **> <** Groupes de travail

Session 4

WG 1 (Aula Magna)

Marlene Alves Dias, Tânia Maria Mendonça Campos, Sirlene Neves de Andrade Les besoins de changement des propositions pour l'enseignement de la notion de fonction au Brésil.

Talya Gilat, Miriam Amit Ambiguous environmental situations invoke students' diversity and creativity.

WG 2 (Aula Bianca)

Nielce Meneguelo da Costa, Maria Elisabette Brisola Brito, alii Mathematics teachers continuing education and technology: a necessary practice in a globalized context.

David Páez, José Guzmán Mathematical resources used by the teacher as a source of reflection.

WG 3 (Aula Rossa)

Charoula Stahopoulou, Peter Appelbaum Reflecting on a (trans-national) peer observation teaching experience in higher education: questions and perspectives.

Marina Ascari A lens to look behind teacher's activities in the class.

Mokos Evagelos, Ioannis Noulis, Sonia Kafoussi Metacognitive functions of a student with asperger syndrome student: a case study.

WG 4 (Aula Verde)

Discussion, préparation de la présentation des conclusions

WG 5 (Aula Principe d'Acaia)

Laura Maffei, Franco Favilli Language and mathematics teaching/learning in multicultural classrooms in Europe: Exploring problems and difficulties

13:00-14:30 Lunch > < Déjeuner

14:30-15:30 Meeting with plenary speakers

> <

Rencontre avec les conférenciers

Erich Ch. Wittmann, Nuria Gorgorió

15:30-17:30 Forum of Ideas > < Forum des idées

17:30-18:30 Workshops > < Ateliers

Session 2

Gemma Gallino, Flavia Piazza Une passion pour les mathématiques.

Elisabetta Ferrando Application of a particular task design to promote students' argumentative skills.

Michaela Kaslová l´entier et ses parties (Whole and its parts).

George L. Selitto, Blanco Identifying Learning Styles: Student Performance and Teacher Effectiveness.

19:00 Visit to the Museo di Scienze Naturali

> <

Visite au Museo di Scienze Naturali

(via Giolitti 36, Torino)

20:30 social dinner > < dîner social

(via Giolitti 36, Torino)

Friday, July 26, 2013

Università degli Studi di Torino, Via Po, 17

9:00-10:00 (Aula Magna)

Franco Favilli (Italy)

Globalization in Mathematics Education: integrating indigenous and academic knowledge

> **<**

La mondialisation dans l'enseignement des mathématiques: l'intégration des connaissances naturelles et savoirs

10:00-11:00 Report of Working Groups

> **<**

Rapport des groupes de travail

11:00-12:00 Round Table **>** **<** Table ronde

« Reflections on the Conference »

« Réflexions sur la Conférence »

12:00 Closing Ceremony and Farewell Cocktail

> **<**

Cérémonie de clôture et cocktail

SEE YOU AT

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AU REVOIR À

...

CIEAEM66

Is there only π ?

Il y a seulement π ?

Stereogram the artist Japanese jun Oi, taken from "*La fascinant nombre* π ", *1997*

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