



Unione
Matematica
Italiana

1222-2022
800
ANNI



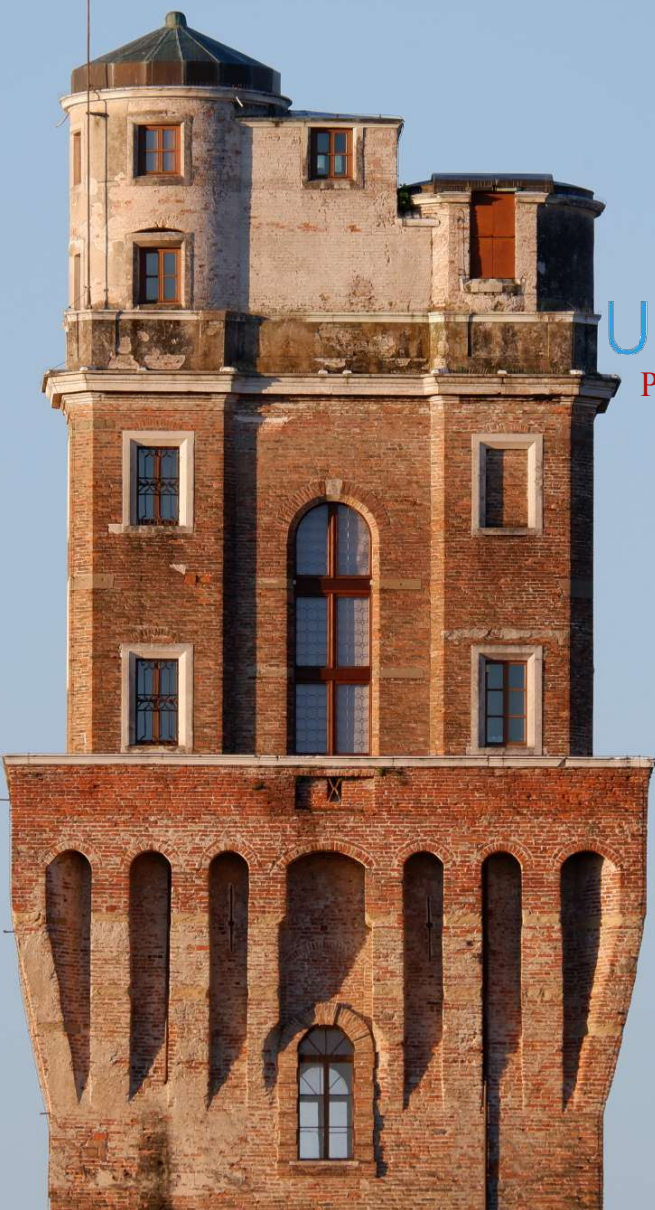
UNIVERSITÀ
DEGLI STUDI
DI PADOVA



DIPARTIMENTO
MATEMATICA
DIPARTIMENTO DI MATEMATICA "TULLIO LEVI-CIVITA"

Program at a glance

UMI **100** UniPD
Padova, 23rd-27th May 2022



Welcome from Organizing Committee and Scientific Committees Chairs

Welcome to Padova and to 100 UMI - 800 UniPD
“100 Years Unione Matematica Italiana - 800 Years Università di Padova”!

In 2022, the Italian Mathematical Union (UMI) and the University of Padova celebrate the 100th anniversary and the 800th anniversary of their founding, respectively. On this unique occasion, UMI and the Department of Mathematics of University of Padova have organized an international conference hosting a world renowned list of plenary speakers and panelists. The conference hosts also the “First UMI Meeting of PhD students”.

We have done our best to offer a rich program with several and diversified points of attraction. So we sincerely hope that you will find the plenary talks a rewarding experience and the three roundtables a useful opportunity to look into the past, present and future of our community. We have also included in the program two occasions of “mathematical” entertainment involving comics and drama. Last but not least, we welcome with pride the presence of over 110 young speakers coming from all over Italy. They represent the future of mathematics in our country.

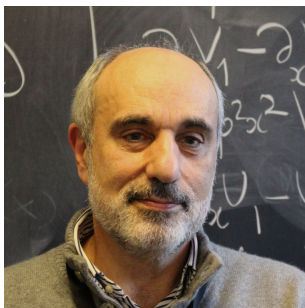
We would like to take this opportunity to thank the University of Padova and Rettrice Prof. Daniela Mappelli. Moreover, we would like to thank Prorettore Prof. Marco Ferrante for all his support and helps in organizing this event. We thank as well the Director of the Department of Mathematics Prof. Bruno Chiarellotto. We would like to express our gratitude to Prof. Francesco Rossi and to all members of the Organizing and Scientific Committees who contributed essentially to the success of the final program of this conference. Special thanks are due to Cinzia Clemente and to the administrative and technical staff of the Department of Mathematics, as well as to Gioia Grigolin and to the staff of the area communication and events, for their dedication and professional work in helping to organize every logistic aspect of this conference. We thank also Elisabetta Velabri, Milena Tansini Pagani and Marcello Villani of the staff of UMI for all their valuable contribution.

We look forward to your participation in a stimulating and productive environment of the 100 UMI - 800 UniPD conference.

Fabio Ancona



Piermarco Cannarsa



Barbara Nelli



Program at a Glance

Monday 23rd - Aula Magna di Palazzo Bo

08:30 *Registration*

09:00 *Opening*

09:30 **Claire Voisin** - *On the complex cobordism classes of hyper-Kähler manifolds*
(Chair: R. Pardini)

10:30 *Coffee break*

11:00 **Martin Hairer** - *A mathematical journey through scales* (Chair: F. Flandoli)

12:00 **Livia Giacardi** - *The Unione Matematica Italiana in the interwar period.*
Scientific, institutional and political aspects (Chair: C. Ciliberto)

12:40 *Lunch*

14:30 **Laura De Marco** - *Rigidity and uniformity in algebraic dynamics*
(Chair: C. Ulcigrai)

15:30 **Luca Dell'Aglio** - *Padova and the absolute differential calculus*
(Chair: F. Cardin)

16:10 *Coffee break*

16:40 **Round Table “The usefulness of useless knowledge”**: J.-P. Bourguignon,
P. Corna Pellegrini, I. Daubechies, A. Sangiovanni-Vincentelli (Chair: T. Pievani)

21:00 **Play “Spaghetti e Levi Civita”** by Teatro Boxer of Andrea Pennacchi
(Sala dei Giganti, in Italian)

Tuesday 24th - Aula Magna di Palazzo Bo

09:00 **Alberto Bressan** - *Lagrangian Systems Controlled by Active Constraints*
(Chair: M. Bardi)

10:00 **Peter Scholze** - *Condensed Mathematics* (Chair: B. Chiarellotto)

11:00 *Coffee break*

11:30 **Camillo De Lellis** - *Boundary regularity of minimal surfaces*
(Chair: P. Marcati)

12:30 *Lunch*

14:30 **Cynthia Dwork** - *Outcome Indistinguishability, Scaffolding Sets, and*
Pan-Calibration (Chair: F. Baldassarri)

15:30 *Coffee break*

16:00 **Round Table “Mathematical challenges in an AI driven world”**:
P. Baldi, G. Kutyniok, Y. LeCun, T. Poggio (Chair: E. De Vito)

Wednesday 25th - Auditorium Pollini

09:00 **Alessio Figalli** - *Ubiquità del Trasporto Ottimale* (Chair: P. Cannarsa)

10:00 **Prizes Award**

10:30 **Corollario Choir concert**

11:00 *Coffee break*

11:30 **Assemblea UMI**

13:00 *Light lunch (NEW LOCATION: Torre Archimede)*

Free afternoon

19:00 *Free transportation from Torre Archimede to the location of Social Dinner*

19:30 *Social Dinner (Villa Foscari-Rossi)*

Thursday 26th - Torre Archimede

09:00* **Alessandro Giuliani** - *Spontaneous breaking of continuous symmetry in the Heisenberg model: old and new* (Chair: B. Nelli)
10:00 **Parallel sessions - BDEFGJKLMN**
11:00 *Coffee break - Ground Floor*
11:30 **Parallel sessions - BDEFGJKLMN**
12:30 *Lunch*
14:00* **Andrea Mondino** - *Smooth and non-smooth aspects of Ricci curvature lower bounds* (Chair: D. Vittone)
15:00 *Coffee break - Ground Floor*
15:30 **Parallel sessions - ACDEGJKLMN**
16:30* **Round Table “11² years after Volterra: applying mathematics to biological and social sciences”**: I. Dorigatti, M. Fornasier, B. Piccoli (Chair: R. Natalini)

Friday 27th - Torre Archimede

08:30 **Parallel sessions - EGJM**
09:00 **Parallel sessions - ABCEGHJLM**
09:30* **Giulia Saccà** - *Holomorphic symplectic manifolds and completely integrable systems* (Chair: B. Nelli)
10:30 *Coffee break - Ground Floor*
11:00* **The after math. Quali lavori per i PhD in Matematica? Incontro con alcune aziende** (in Italian, Chairs: G. Callegaro, A. Larese)
12:00 **Parallel sessions - ABCDFGHIKM**
13:00 *Lunch*
14:30 **Parallel sessions - ABCDFGIKLM**
15:30* **Daniele Di Pietro** - *From physical models to advanced numerical methods through de Rham cohomology* (Chair: S. De Marchi)
16:30 *Farewell Spritz - Ground Floor*

* In Torre Archimede, all Plenaries and Round Tables are in Room 1A150 - 1st Floor, with live streaming in Room 1C150 - 1st Floor.

Complete program on the conference app or www.100umi800unipd.it/program
Send your questions to the speakers: www.100umi800unipd.it/question

List of Parallel Sessions - Thursday 26th and Friday 27th

- | | |
|---|---|
| A: Logica, Storia, Didattica | I: Analisi Funzionale |
| B: Algebra | J: Probabilità, Ricerca operativa, |
| C: Geometria Algebrica | Statistica |
| D: Geom. Differenziale e Topologia | K: Fisica Matematica |
| E: Calcolo delle Variazioni | L: Analisi Numerica |
| F: Teoria del controllo | M: Math 4 Real World |
| G: Equazioni a derivate parziali | N: Biomatematca |
| H: Equazioni a derivate parziali lineari | |

		ROOM	Thursday 26th					
			10.00	10.30	11.30	12.00	15.30	16.00
1st Floor	1A150	Sess G:	Affili	Falocchi	Zaccaron	Goffi	Guarnotta	Hientzsch
	1AD100	Sess D:	Fantini	Fogagnolo	Landi	Mathis	Roncoroni	Sarti
	1BC45	Sess K:	Bevilacqua	Camilli	Caraci	Dolce	Koudjinan	Paparini
	1BC50	Sess E:	Merlo	Stefani	Maione	Oronzio	Canneori	Lombardini
	1C150	Sess M:	Bachini	Biagioli	Losapio	Marchetti	Melas	Meneghetti
2nd Floor	2AB40	Sess N:	Fresca	Piersanti	Salvador	Huynh	Zingaro	Sensi
	2AB45	Sess B:	Cisto	Di Trani	Magrone	Mazzotta	Sess A: Scalambro	Agostini
	2BC30	Sess J:	Catalano	Aleandri	Ascione		Doldi	Grotto
	2BC60	Sess L:	Andò	Caruso	Di Credico	Di Giovacchino	Franchini	Macca
	ASTA	Sess F:	Mendico	Scagliotti	Urbani	Baranzini	Sess C: Secci	Spelta

ROOM		Friday 27th					
		08.30	09.00	12.00	12.30	14.30	15.00
1st Floor	1A150	Sess G: Comi	Girardi	Proietti Lippi	Patriarca	Gentile	Meglioli
	1AD100			Sess D: Stecconi	Spessato	Savi	Scarpa
	1BC45	Sess J: Quattropani	Martini	Sess K: Loy	Viviani	Vergallo	Trapasso
	1BC50		Sess B: Rogers	Yu	Taufer	Noce	Pavon
	1C150	Sess M: Seracini	Urbinati	Della Marca	Dessole	Gastaldon	Colajanni
2nd Floor	2AB40		Sess L: Visinoni	Sess I: Maiuriello	Chalmoukis	Bartolucci	Capolli
	2AB45		Sess A: Pasquazi	Bini	Bagossi	Delle Rose	Manolino
	2BC30		Sess C: Prieto-Montañez	Pernice	Franceschini	Conti	Fallucca
	2BC60		Sess H: Forcillo	Luzzini	Ognibene	Sess L: Pes	Manucci
	ASTA	Sess E: Semola	Frassu	Sess F: Marzufero	Fusco	Chiri	Ciampa

Sponsors



Fondazione
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di Padova e Rovigo



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Funded by: STARS Consolidator Grants (STARS-CoG)@UNIPD 2019 -

ConNECT - Control of Nonlocal Equations for Crowd and Traffic models

Conference Committees

Scientific committee of 100-800 meeting at Palazzo Bo (23rd-24th May)

Francesco Baldassarri (Univ. Padova), Piermarco Cannarsa (**Chair**, Univ. Roma "Tor Vergata"), Lucia Caporaso (Univ. Roma Tre), Michelangelo Conforti (Univ. Padova), Franco Flandoli (SNS di Pisa), Corinna Ulcigrai (Univ. Zürich).

Scientific committee of the First UMI meeting of PhD students (26th-27th May)

Martino Bardi (Univ. Padova), Anna Fino (Univ. Torino), Adriana Garroni ("Sapienza" Univ. Roma), Angelo Felice Lopez (Univ. Roma Tre), Benedetta Morini (Univ. Firenze), Barbara Nelli (**Chair**, Univ. dell'Aquila), Gianluca Vinti (Univ. Perugia).

Organizing committee

Univ. Padova: Fabio Ancona (**Chair**), Davide Barilari, Martino Bardi, Olga Bernardi, Alessandra Bianchi, Laura Caravenna, Giovanna Carnovale, Francesco Ciraulo, Marco Ferrante, Antonia Larese, Paola Mannucci, Fabio Marcuzzi, Ernesto C. Mistretta, Francesco Rossi, Alberto Tonolo.

Alessandra Bernardi (Univ. Trento), Fausto Ferrari (Univ. Bologna)



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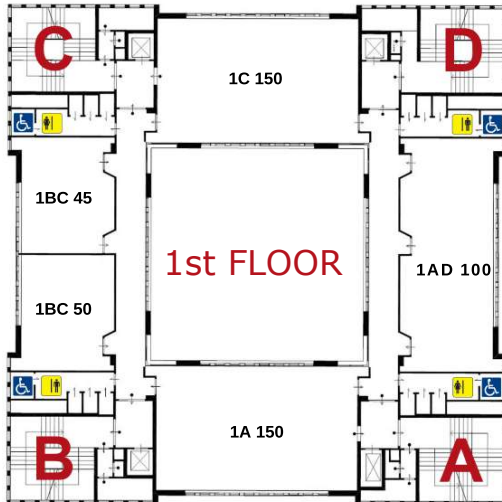
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Dipartimento di
Matematica
*Torre Archimede
via Trieste, 63*



UMI 100 UniPD

E POLO UNIV. BEATO PELLEGRINO
via Beato Pellegrino, 32

MUMBLE!
MATEMATICA A FUMETTI

D DIPARTIMENTO DI MATEMATICA
via Trieste 63



B SALA DEI GIGANTI - Palazzo del Liviano
Piazza Capitaniato



C AUDITORIUM Conservatorio Pollini
via Carlo Cassan, 17



A AULA MAGNA - Palazzo del Bo
via VIII febbraio, 2

Organizers



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