

# PROGRAM OF THE MINI-COURSES 2022

## 20-24 June

Mini-courses are in boldface

|                        |                                                                                                                                                     |
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| <b>Monday 20 June</b>  | Room P4                                                                                                                                             |
| 9.05 – 9.15            | Welcome message                                                                                                                                     |
| 9.15 – 10.00           | <b>Valeria Chiado' Piat</b> - Politecnico di Torino, Italy.<br><i>Homogenization problems in perforated domains</i>                                 |
| 10.15 – 11.00          | <b>Michael Christ</b> - University of California, Berkeley, USA,<br><i>Introduction to implicitly oscillatory multilinear integral inequalities</i> |
| 11.00 – 11.30          | Coffee Break                                                                                                                                        |
| 11.30 – 12.15 (online) | <b>Rupert Frank</b> , University of Munich, Germany. <i>Asymptotic properties of the eigenvalues of differential operators</i>                      |

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| <b>Tuesday 21 June</b> | Room P4                                                                                                                                                  |
| 9.15 – 10.00           | <b>Valeria Chiado' Piat</b> - Politecnico di Torino, Italy.<br><i>Homogenization problems in perforated domains</i>                                      |
| 10.15 – 11.00          | <b>Michael Christ</b> - University of California, Berkeley, USA,<br><i>Introduction to implicitly oscillatory multilinear integral inequalities</i>      |
| 11.00 – 11.30          | Coffee Break                                                                                                                                             |
| 11.30 – 12.00          | Sergei Rogosin, Belarusian State University, Minsk, Belarus.<br><i>Construction of <math>2 \times 2</math> Fuchsian System with Five Singular Points</i> |
| 12.15 – 13.00 (online) | <b>Rupert Frank</b> , University of Munich, Germany. <i>Asymptotic properties of the eigenvalues of differential operators</i>                           |
| <b>Lunch</b>           |                                                                                                                                                          |
| 16.30 – 18.30          | <b>Excursion:</b> Visit Palazzo Bo'. Meeting at the ground floor of Edificio Paolotti Via Paolotti 2/a.                                                  |

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| <b>Wednesday 22 June</b> | Room P4                                                                                                                                                                                        |
| 9.15 – 10.00             | <b>Valeria Chiado' Piat</b> - Politecnico di Torino, Italy.<br><i>Homogenization problems in perforated domains</i>                                                                            |
| 10.15 – 11.00            | <b>Michael Christ</b> - University of California, Berkeley, USA,<br><i>Introduction to implicitly oscillatory multilinear integral inequalities</i>                                            |
| 11.00 – 11.30            | Coffee Break                                                                                                                                                                                   |
| 11.30 – 12.15 (online)   | <b>Rupert Frank</b> , University of Munich, Germany. <i>Asymptotic properties of the eigenvalues of differential operators</i>                                                                 |
| <b>Lunch</b>             |                                                                                                                                                                                                |
| 15.00 – 15.30            | Daniela Di Donato, Politecnico delle Marche-Ancona, Italy. <i>A new point of view for intrinsically Lipschitz graphs in the sense of Franchi, Serapioni and Serra Cassano in metric spaces</i> |
| 15.30 – 16.00            | Francesco Ferrareso, Cardiff University, United Kingdom. <i>Spectral approximation of the lossy Drude-Lorentz model in electromagnetism</i>                                                    |

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| 16.00 – 16.30 | Marco Fraccaroli, University of Bonn, Germany. <i>Phase space projections</i> |
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| <b>Thursday 23 June</b> | Room P4                                                                                                                                          |
| 9.15 – 10.00            | <b>Valeria Chiado' Piat</b> - Politecnico di Torino, Italy. <i>Homogenization problems in perforated domains</i>                                 |
| 10.15 – 11.00           | <b>Michael Christ</b> - University of California, Berkeley, USA, <i>Introduction to Implicitly Oscillatory Multilinear Integral Inequalities</i> |
| 11.00 – 11.30           | Coffee Break                                                                                                                                     |
| 11.30 – 12.00           | Luigi Provenzano, Università di Roma La Sapienza, Italy. <i>Isoparametric foliations and the Pompeiu property</i>                                |
| 12.15 – 13.00 (online)  | <b>Rupert Frank</b> , University of Munich, Germany. <i>Asymptotic properties of the eigenvalues of differential operators</i>                   |

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| <b>Friday 24 June</b>  | Room P4                                                                                                                                          |
| 9.15 – 10.00           | <b>Michael Christ</b> - University of California, Berkeley, USA, <i>Introduction to Implicitly Oscillatory Multilinear Integral Inequalities</i> |
| 10.15 – 10.45 (online) | Anatoly Golberg, Holon Institute of Technology, Israel. <i>Multidimensional absolute continuity and related mapping classes</i>                  |
| 10.45 – 11.15 (online) | Damian Greco, Swansea University, United Kingdom. <i>On a class of Thomas-Fermi type problems</i>                                                |
| 11.15 – 11.45 (online) | Jianjun Zhang, Chongqing Jiaotong University, China. <i>A global branch approach to normalized solutions for Schrödinger equations</i>           |

**VENUE:** Mini-courses will be held in **Room P4, located on the 2nd floor of Edificio Paolotti, Via Paolotti 2/a**. How to reach room P4 from the entrance of the Department of Mathematics (Via Trieste 63): exit tower A (which carries the street no. 63), reach the cross road which you see just before the junction of Via Trieste with Via Bassi, cross the road and go up on the channel argin, cross the pedestrian bridge, cross the road, walk through the gate, continue walking straight to the next gate, cross the gate, cross the road and continue straight into Via Paolotti, walk in Via Paolotti till the end of the street where you find on the left a big building with a green gate and a long front porch: that is Edificio Paolotti. Enter the door located at the very end of the front porch and proceed to the second floor where you find Room P4.