

PREFACE

NICOLA ABATANGELO AND EUGENIO VECCHI

Nonlinear PDEs is one of the traditional topics developed by the Italian school of Analysis since its early days. These have recently met with the theory of nonlocal operators, which has been a trending topic in the international community in the past decade or so. The awareness of this fact has been the driving idea for organizing an event going over some of the most recent results about nonlinear and/or nonlocal equations, in a mixture of the two bridging classical ideas and new challenges, classical problems and new approaches.

Such an event has taken place at the Mathematics Department of the University of Bologna on September 8th and 9th 2022 under the title “NonPUB - Nonlocal and Nonlinear Partial Differential Equations at the University of Bologna”. The invited speakers were all young researchers at early stages of their careers, more precisely (the specified affiliation refers at the time the workshop)

- : Stefano Biagi (Politecnico di Milano),
- : Claudia Bucur (Università degli Studi di Milano),
- : Matteo Cozzi (Università degli Studi di Milano),
- : Martina Magliocca (Université Paris-Saclay),
- : Edoardo Proietti Lippi (Università degli Studi di Firenze),
- : Alberto Roncoroni (Politecnico di Milano),
- : Delia Schiera (Instituto Superior Técnico, Universidade de Lisboa).

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This volume collects some contributions given during the workshop, which covered a broad range of questions such as evolution equations, critical problems, maximum principles, Liouville-type results, concentration and blow-up phenomena.

Last but not least, we would also like to warmly thank the editorial board of the “Bruno Pini Mathematical Analysis Seminar” for hosting these conference proceedings and especially its Editor-in-Chief, prof. Annamaria Montanari, for her constant and prompt support.

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