Record Nr. UNINA9910809614003321 Non-abelian fundamental groups in Iwasawa theory / / edited by John **Titolo** Coates [and others] [[electronic resource]] Pubbl/distr/stampa Cambridge:,: Cambridge University Press,, 2011 **ISBN** 1-107-23237-6 0-511-98444-8 1-280-48549-3 1-139-22329-1 9786613580474 1-139-21849-2 1-139-21540-X 1-139-22501-4 1-139-22158-2 Descrizione fisica 1 online resource (ix, 310 pages): digital, PDF file(s) Collana London Mathematical Society lecture note series;; 393 Classificazione MAT022000 Disciplina 512.7/4 Soggetti Iwasawa theory Non-Abelian groups Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Title from publisher's bibliographic system (viewed on 05 Oct 2015). Note generali Nota di bibliografia Includes bibliographical references. Nota di contenuto Lectures on anabelian phenomena in geometry and arithmetic / Florian Pop -- On Galois rigidity of fundamental groups of algebraic curves Hiroaki Nakamura -- Around the Grothendieck anabelian section conjecture Mohamed Saidi -- From the classical to the noncommutative Iwasawa theory (for totally real number fields) Mahesh Kakde -- On the MH(G)-conjecture J. Coates and R. Sujatha -- Galois theory and Diophantine geometry Minhyong Kim; 7. Potential modularity -- a survey Kevin Buzzard: 8. Remarks on some locally Qp-analytic representations of GL -- (F) in the crystalline case Christophe Breuil --Completed cohomology -- a survey Frank Calegari and Matthew Emerton -- Tensor and homotopy criteria for functional equations of -adic and classical iterated integrals Hiroaki Nakamura and Zdzisaw Wojtkowiak.

Sommario/riassunto

Number theory currently has at least three different perspectives on non-abelian phenomena: the Langlands programme, non-commutative lwasawa theory and anabelian geometry. In the second half of 2009, experts from each of these three areas gathered at the Isaac Newton Institute in Cambridge to explain the latest advances in their research and to investigate possible avenues of future investigation and collaboration. For those in attendance, the overwhelming impression was that number theory is going through a tumultuous period of theory-building and experimentation analogous to the late 19th century, when many different special reciprocity laws of abelian class field theory were formulated before knowledge of the Artin-Takagi theory. Non-abelian Fundamental Groups and Iwasawa Theory presents the state of the art in theorems, conjectures and speculations that point the way towards a new synthesis, an as-yet-undiscovered unified theory of non-abelian arithmetic geometry.