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Titolo	Lectures on $N_X(p)$ // Jean-Pierre Serre
Pubbl/distr/stampa	Boca Raton, Fla. : , : CRC Press, , 2012
ISBN	0-429-06761-5 1-283-59620-2 9786613908650 1-4665-0193-6
Descrizione fisica	1 online resource (168 p.)
Collana	Research notes in mathematics ; ; v. 11
Classificazione	MAT022000
Disciplina	512.9/422
Soggetti	Polynomials Number theory Representations of groups Cohomology operations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	An AK Peters book.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Front Cover; Contents; Preface; Conventions; Chapter 1. Introduction; Chapter 2. Examples; Chapter 3. The Chebotarev Density Theorem for a Number Field; Chapter 4. Review of $l$ -adic Cohomology; Chapter 5. Auxiliary Results on Group Representations; Chapter 6. The $l$ -adic Properties of $N_X(p)$ ; Chapter 7. The Archimedean Properties of $N_X(p)$ ; Chapter 8. The Sato-Tate Conjecture; Chapter 9. Higher Dimension: the Prime Number Theorem and the Chebotarev Density Theorem; References
Sommario/riassunto	This book presents several basic techniques in algebraic geometry, group representations, number theory, $l$ -adic and standard cohomology, and modular forms. It explores how $N_X(p)$ varies with $p$ when the family $(X)$ of polynomial equations is fixed. The text examines the size and congruence properties of $N_X(p)$ and describes the ways in which it is computed. Along with covering open problems and offering simple, illustrative examples, the author presents various theorems, including the Chebotarev density theorem and the prime number theorem--

The main topic involves counting solutions mod  $p$  of a system of polynomial equations, as  $p$  varies. The book is based on a series of lectures presented by the author in Taiwan. Using this idea, Serre visits algebra and number theory and asks some non-standard questions, especially on group representations--

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