

1. Record Nr.	UNINA9910784004503321
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Titolo	Recent progress in conformal geometry [[electronic resource] /] / Abbas Bahri, Yongzhong Xu
Pubbl/distr/stampa	London, : Imperial College Press, c2007
ISBN	1-281-12065-0 9786611120658 1-86094-860-X
Descrizione fisica	1 online resource (522 p.)
Collana	Imperial College Press advanced texts in mathematics ; ; vol. 1
Altri autori (Persone)	XuYongzhong
Disciplina	516.35 516.36
Soggetti	Conformal geometry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 199, 509).
Nota di contenuto	Preface A. Bahri and Y. Xu; Contents; 1. Sign-Changing Yamabe-Type Problems; 1.1 General Introduction; 1.2 Results and Conditions; 1.3 Conjecture 2 and Sketch of the Proof of Theorem 1; Outline; 1.4 The Difference of Topology; 1.5 Open Problems; 1.6 Preliminary Estimates and Expansions, the Principal Terms; 1.7 Preliminary Estimates; 1.8 Proof of the Morse Lemma at Infinity When the Concentrations are Comparable; 1.9 Redirecting the Estimates, Estimates on $-v_i H_1$; Bibliography; 2. Contact Form Geometry; 2.1 General Introduction 2.2 On the Dynamics of a Contact Structure along a Vector Field of its Kernel 2.3 Appendix 1; 2.4 The Normal Form of (a, v) Near an Attractive Periodic Orbit of v ; 2.5 Compactness; 2.6 Transmutations; 2.7 On the Morse Index of a Functional Arising in Contact Form Geometry; 2.8 Calculation of $\int_2 J(x) \cdot u_2 \cdot u_2$; 2.9 Calculation of $\int_2 J(x) \cdot u_2 \cdot u_4$; 2.10 Other Second Order Derivatives; 2.11 Appendix; Bibliography
Sommario/riassunto	This book presents a new front of research in conformal geometry, on sign-changing Yamabe-type problems and contact form geometry in particular. New ground is broken with the establishment of a Morse lemma at infinity for sign-changing Yamabe-type problems. This family of problems, thought to be out of reach a few years ago, becomes a family of problems which can be studied: the book lays the foundation

for a program of research in this direction. In contact form geometry, a cousin of symplectic geometry, the authors prove a fundamental result of compactness in a variational problem on Legend
