

1. Record Nr.	UNINA9910782388903321
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Titolo	The Casimir effect [[electronic resource] ] : physical manifestations of zero-point energy // K.A. Milton
Pubbl/distr/stampa	New Jersey, : World Scientific, c2001
ISBN	1-281-95620-1 9786611956202 981-281-052-8
Descrizione fisica	1 online resource (320 p.)
Disciplina	530.143
Soggetti	Casimir effect Electric fields
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. 277-292) and index.
Nota di contenuto	Contents ; Preface ; Chapter 1 Introduction to the Casimir Effect ; 1.1 Van der Waals Forces ; 1.2 Casimir Effect ; 1.3 Dimensional Dependence ; 1.4 Applications ; 1.5 Local Effects ; 1.6 Sonoluminescence ; 1.7 Radiative Corrections ; 1.8 Other Topics ; 1.9 Conclusion ; 1.10 General References Chapter 2 Casimir Force Between Parallel Plates ; 2.1 Introduction ; 2.2 Dimensional Regularization ; 2.3 Scalar Green's Function ; 2.4 Massive Scalar ; 2.5 Finite Temperature ; 2.6 Electromagnetic Casimir Force ; 2.7 Fermionic Casimir Force Chapter 3 Casimir Force Between Parallel Dielectrics 3.1 The Lifshitz Theory ; 3.2 Applications ; 3.3 Experimental Verification of the Casimir Effect ; Chapter 4 Casimir Effect with Perfect Spherical Boundaries ; 4.1 Electromagnetic Casimir Self-Stress on a Spherical Shell 4.2 Fermion Fluctuations Chapter 5 The Casimir Effect of a Dielectric Ball: The Equivalence of the Casimir Effect and van der Waals Forces

; 5.1 Green's Dyadic Formulation ; 5.2 Stress on  
the Sphere ; 5.3 Total Energy ; 5.4  
Fresnel Drag ; 5.5 Electrostriction  
5.6 Dilute Dielectric-Diamagnetic Sphere  
5.7 Dilute Dielectric Ball ; 5.8 Conducting Ball  
; 5.9 Van der Waals Self-Stress for a Dilute Dielectric Sphere  
; 5.10 Discussion ; Chapter 6 Application to Hadronic  
Physics: Zero-Point Energy in the Bag Model  
6.1 Zero-point Energy of Confined Gluons

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Sommario/riassunto

In its simplest manifestation, the Casimir effect is a quantum force of attraction between two parallel uncharged conducting plates. More generally, it refers to the interaction - which may be either attractive or repulsive - between material bodies due to quantum fluctuations in whatever fields are relevant. It is a local version of the van der Waals force between molecules. Its sweep ranges from perhaps its being the origin of the cosmological constant to its being responsible for the confinement of quarks. This monograph develops the theory of such forces, based primarily on physically tr

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