Record Nr. UNINA9910966347103321 Autore Bronfenbrenner Urie <1917-2005.> Titolo The ecology of human development: experiments by nature and design // Urie Bronfenbrenner Cambridge, MA,: Harvard University Press, 1996 Pubbl/distr/stampa **ISBN** 9780674252950 0674252950 9780674028845 0674028848 Edizione [1st ed.] Descrizione fisica xv, 330 pages Disciplina 155.4 Child psychology - Research Soggetti Developmental psychology - Research Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references (p. 299-319) and index. Nota di contenuto PART ONE: An ecological orientation -- 1. Purpose and perspective --2. Basic concepts -- PART TWO: Elements of the setting -- 3. The nature and function of molar activities -- 4. Interpersonal structures as contexts of human development -- 5. Roles as contexts of human development -- PART THREE: The analysis of settings -- 6. The laboratory as an ecological context -- 7. Children's institutions as contexts of human development -- 8. Day care and preschool as contexts of human development -- PART FOUR: Beyond the microsystem -- 9. The merosystem and human development -- 10. The exosystem and human development -- 11. The macrosystem and human development. Sommario/riassunto Here is a book that challenges the very basis of the way psychologists have studied child development. According to Urie Bronfenbrenner, one of the world's foremost developmental psychologists, laboratory studies of the child's behavior sacrifice too much in order to gain experimental control and analytic rigor. Laboratory observations, he argues, too often lead to "the science of the strange behavior of

children in strange situations with strange adults for the briefest possible periods of time." To understand the way children actually

develop, Bronfenbrenner believes that it will be necessary to observe their behavior in natural settings, while they are interacting with familiar adults over prolonged periods of time. This book offers an important blueprint for constructing such a new and ecologically valid psychology of development. The blueprint includes a complete conceptual framework for analysing the layers of the environment that have a formative influence on the child. This framework is applied to a variety of settings in which children commonly develop, ranging from the pediatric ward to daycare, school, and various family configurations. The result is a rich set of hypotheses about the developmental consequences of various types of environments. Where current research bears on these hypotheses, Bronfenbrenner marshals the data to show how an ecological theory can be tested. Where no relevant data exist, he suggests new and interesting ecological experiments that might be undertaken to resolve current unknowns. Bronfenbrenner's groundbreaking program for reform in developmental psychology is certain to be controversial. His argument flies in the face of standard psychological procedures and challenges psychology to become more relevant to the ways in which children actually develop. It is a challenge psychology can ill-afford to ignore.

Record Nr. UNINA9911020425003321 Autore Polini Eleonora Titolo Broadband Quantum Noise Reduction in Advanced Virgo Plus: From Frequency-Dependent Squeezing Implementation to Detection Losses and Stray Light Mitigation / / by Eleonora Polini Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2025 Pubbl/distr/stampa **ISBN** 3-031-95143-3 Edizione [1st ed. 2025.] Descrizione fisica 1 online resource (321 pages) Collana Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5061 530.1 Disciplina Soggetti Gravitation Quantum optics **Astrophysics** Optoelectronic devices **Gravitational Physics** Quantum Optics Optoelectronic Devices Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Gravitational waves -- Ground based gravitational waves detectors --Theory of quantum light in gravitational waves detectors -- Quantum noise reduction system overview in Advanced Virgo Plus -- Quantum noise reduction system commissioning -- Stray light in gravitational waves detectors -- Ghost beams study and mitigation -- Active control of scattered light on the FDS system -- Matching of the squeezing beam to the ITF -- New high finesse Output Mode Cleaner for Advanced Virgo Plus. Sommario/riassunto This book presents the first implementation of frequency-dependent squeezing in the Virgo gravitational wave detector, a technique that reduces quantum noise across the entire detection band. By lowering noise, it enhances Virgo's ability to observe the universe. It provides a detailed account of the experimental optical system—spanning hundreds of meters—and the measurement campaign that led to the

first observation of frequency-dependent squeezing, with ellipse

rotation occurring at the target frequency of a few tens of Hz. Additionally, the book covers the characterization and commissioning of a new Output Mode Cleaner cavity in Virgo to minimize optical losses on squeezed states. Finally, it examines the impact of stray light noise at low frequencies and explores mitigation strategies to improve detector sensitivity.