Record Nr. UNINA9910451341803321 Quantum aspects of beam physics [[electronic resource]]: the Joint **Titolo** 28th ICFA Advanced Beam Dynamics and Advanced & Novel Accelerators Workshop, Hiroshima, Japan, 7-11 January 2003 / / editors, Pisin Chen & Kevin Reil Pubbl/distr/stampa Singapore, : World Scientific, c2004 **ISBN** 1-281-89839-2 9786611898397 981-270-233-4 Descrizione fisica 1 online resource (541 p.) Altri autori (Persone) ChenPisin <1950-> ReilKevin Disciplina 539.7/3 Soggetti Beam dynamics Quantum electrodynamics Particle beams Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "This was the third in the QABP workshop series"--Pref. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Preface P. Chen; CONTENTS; I. Quantum Fluctuations and Methodologies in Beam Physics: II. Photon-Electron Interaction in Beam Production, Cooling and Monitoring; III. Beam Phenomena under Strong Fields; IV. High Energy and Laboratory Astrophysics; V. Critical Issues in Linear Colliders, Plasma Accelerators, and Ultra Cold Beams: Appendices; Committees; List of Participants; Conference Program; Conference Photos: Author Index Sommario/riassunto This proceedings volume of the 3rd International Workshop on Quantum Aspects of Beam Physics, presents the latest advances in beam dynamics. The frontiers of beam research point to increasingly

Quantum Aspects of Beam Physics, presents the latest advances in beam dynamics. The frontiers of beam research point to increasingly high energy, greater brightness and lower emittance beams with ever-increasing particle species. These demands have triggered a rapidly growing number of beam phenomena that involve quantum effects. In addition to the more established topics, this volume covers topics on high energy-density particle and photon beams for laboratory