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Collana	Advanced series on directions in high energy physics ; ; vol. 27
Altri autori (Persone)	FabjanC. W BenvenutiCristoforo
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Soggetti	Particles (Nuclear physics) - Research Particles (Nuclear physics) - Technological innovations Electronic books
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Nota di contenuto	The 600 MeV Synchrocyclotron (SC): laying the foundation / Brian Allardyce and Giuseppe Fidecaro -- The Proton Synchrotron (PS): at the core of the CERN accelerators / Donald Cundy and Simone Gilardoni -- The Intersecting Storage Rings (ISR): the first Hadron Collider / Christian Fabjan and Kurt Hubner -- The Super Proton Synchrotron (SPS): a tale of two lives / Niels Doble, Lau Gatignon, Kurt Hubner and Edmund Wilson -- The CERN antiproton programme: imagination and audacity rewarded / Vinod Chohan and Pierre Darriulat -- The Large Electron Positron collider (LEP): probing the standard model / Thomas Taylor and Daniel Treille -- The Large Hadron Collider (LHC): the energy frontier / Giorgio Brianti and Peter Jenni -- Data handling and communications / Frederic Hemmer and Pier Giorgio Innocenti -- Knowledge and technology: sharing with society / Cristoforo Benvenuti, Christine Sutton and Horst Wenninger -- Managing the laboratory and large projects / Philippe Lebrun and Thomas Taylor -- R&D for the future / Kurt Hubner, Daniel Schulte and Daniel Treille.
Sommario/riassunto	"Big" science and advanced technology are known to cross-fertilize. This book emphasizes the interplay between particle physics and

technology at CERN that has led to breakthroughs in both research and technology over the laboratory's first 60 years. The innovations, often the work of individuals or by small teams, are illustrated with highlights describing selected technologies from the domains of accelerators and detectors. The book also presents the framework and conditions prevailing at CERN that enabled spectacular advances in technology and contributed to propel the European organization into the league of leading research laboratories in the world. While the book is specifically aimed at providing information for the technically interested general public, more expert readers may also appreciate the broad variety of subjects presented. Ample references are given for those who wish to further explore a given topic."--

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