1.	Record Nr.	UNINA9910257399803321
	Titolo	Strings and Symmetries [[electronic resource]] : Proceedings of the Gürsey Memorial Conference I, Held at Istanbul, Turkey, 6–10 June 1994 / / edited by Gülen Aktas, Cihan Saclioglu, Meral Serdaroglu
	Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1995
	ISBN	3-540-49204-6
	Edizione	[1st ed. 1995.]
	Descrizione fisica	1 online resource (XIV, 393 p. 7 illus., 1 illus. in color.)
	Collana	Lecture Notes in Physics, , 0075-8450 ; ; 447
	Disciplina	530.1/4
	Soggetti	Physics Elementary particles (Physics) Quantum field theory Mathematical Methods in Physics Numerical and Computational Physics, Simulation Elementary Particles, Quantum Field Theory
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Bibliographic Level Mode of Issuance: Monograph
	Nota di contenuto	Superstrings: The view from below -- Note on holomorphic anomalies in topological field theories -- Folded strings -- Algebro-geometric aspects of the Bethe equations -- Extended superconformal symmetry, Freudenthal triple systems and gauged WZW models -- A three-dimensional fractional string -- Why don't we have a covariant superstring field theory? -- Search for duality symmetries in p-branes -- Non linear identities between unitary minimal Virasoro characters -- Finite deformations of CF T and space-time geometry -- Non-standard fermion propagators from conformal field theory -- Manifestly space-time conformally invariant null strings -- Lie algebras and exactly solvable problems in Quantum Mechanics -- Geometry and arithmetic of factorized S-matrices -- Duality principle and braided geometry -- HyperKähler quotients and N=4 gauge theories in D=2 -- Four dimensional integrable theories -- Regularisation, the BV method, and the antibracket cohomology -- E 10 for beginners -- Symmetry principles for string theory -- Are on-shell 3-string amplitudes the

structure constants of the fake monster Lie algebra? -- Auxiliary fields for super Yang-Mills from division algebras -- Automorphism groups of discrete octonions and possible applications in physics -- Spatial geometry and the Wu-Yang ambiguity -- The classification of third order PDE with respect to symmetry -- Symmetries of large systems of differential equations -- q-Deformed path integral and generalized grassmann variables -- Quantum mechanical quantum group in two-dimensional gravity -- Electromagnetism and gravity in noncommutative geometry -- The geometry of W symmetry algebras -- Quantization of a gauge theory of quadratic Lie algebras in 2d -- The BV-algebra structure of W 3 cohomology -- Black hole solution of topologically massive gravity -- Linearized gravity in "closed" universes with continuous symmetries -- Quantum fluctuations in the presence of gravitational waves -- On the radiative processes near cosmic strings -- Integrable models in multidimensional cosmology with multicomponent perfect fluid and Toda lattices -- Effective field theory -- Gürsey's chiral model and its modifications -- Instability of a Nielsen-Olesen vortex embedded in the electroweak theory -- Proper-time methods in the presence of non-constant background fields -- On Abelian bosonization of free fermi fields in three space dimensions -- Internal spin structure of the nucleon -- Strings and membranes in electron theory -- Quark and lepton masses and the Higgs field in fifth dimension -- Regularization and quantization of higher dimensional current algebras -- Fermion masses and mixing from an extra gauge symmetry -- E6 model manifestations in z and ? decays -- Anomaly and exotic statistics in one dimension -- Samuel MacDowell Closing Remarks Gürsey Memorial Conference I June 6–10,1994.

| Sommario/riassunto | The topics in this volume constitute a fitting tribute by distinguished physicists and mathematicians. They cover strings, conformal field theories, W and Virasoro algebras, topological field theory, quantum groups, vertex and Hopf algebras, and non-commutative geometry. The relatively long contributions are pedagogical in style and address students as well as scientists. |