1.	Record Nr. Autore Titolo	UNINA9910642297703321 Battistelli Elia S. The Fifteenth Marcel Grossmann Meeting : On Recent Developments In Theoretical And Experimental General Relativity, Astrophysics, And Relativistic Field Theories - Proceedings Of The Mg15 Meeting On General Relativity (In 3 Volumes) / / Elia S. Battistelli, Robert T. Jantzen, Remo Ruffini
	Pubbl/distr/stampa	Singapore : , : World Scientific Publishing Company, , 2022
	Descrizione fisica	1 online resource (2281 pages)
	Disciplina	523.1
	Soggetti	Cosmology - Congresses
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Sommario/riassunto	The three volumes of the proceedings of MG15 give a broad view of all aspects of gravitational physics and astrophysics, from mathematical issues to recent observations and experiments. The scientific program of the meeting included 40 morning plenary talks over 6 days, 5 evening popular talks and nearly 100 parallel sessions on 71 topics spread over 4 afternoons. These proceedings are a representative sample of the very many oral and poster presentations made at the meeting.Part A contains plenary and review articles and the contributions from some parallel sessions. The contents range from the mathematical foundations of classical and quantum gravitational theories including recent developments in string theory, to precision tests of general relativity including progress towards the detection of gravitational waves, and from supernova cosmology to relativistic astrophysics, including topics such as gamma ray bursts, black hole physics both in our galaxy and in active galactic nuclei in other galaxies, and neutron star, pulsar and white dwarf astrophysics. Parallel sessions touch on dark matter, neutrinos, X-ray sources, astrophysical black holes, neutron stars, white dwarfs, binary systems, radiative transfer, accretion disks, quasars, gamma ray bursts, supernovas,

alternative gravitational theories, perturbations of collapsed objects, analog models, black hole thermodynamics, numerical relativity, gravitational lensing, large scale structure, observational cosmology, early universe models and cosmic microwave background anisotropies, inhomogeneous cosmology, inflation, global structure, singularities, chaos, Einstein-Maxwell systems, wormholes, exact solutions of Einstein's equations, gravitational waves, gravitational wave detectors and data analysis, precision gravitational measurements, quantum gravity and loop quantum gravity, quantum cosmology, strings and branes, self-gravitating systems, gamma ray astronomy, cosmic rays and the history of general relativity.