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Sommario/riassunto

From supernovae and gamma-ray bursts to the accelerating Universe, this is an exploration of the intellectual threads that lead to some of the most exciting ideas in modern astrophysics and cosmology. This fully updated second edition incorporates new material on binary stars, black holes, gamma-ray bursts, worm-holes, quantum gravity and string theory. It covers the origins of stars and their evolution, the mechanisms responsible for supernovae, and their progeny, neutron stars and black holes. It examines the theoretical ideas behind black

holes and their manifestation in observational astronomy and presents neutron stars in all their variety known today. This book also covers the physics of the twentieth century, discussing quantum theory and Einstein's gravity, how these two theories collide, and the prospects for their reconciliation in the twenty-first century. This will be essential reading for undergraduate students in astronomy and astrophysics, and an excellent, accessible introduction for a wider audience.

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Continuous Mercury Monitoring Systems.

Sommario/riassunto

"The new edition of the only single-volume reference on both the regulatory and technical aspects of U.S. and international continuous emission monitoring (CEM) systems Continuous Emission Monitoring presents clear, accurate, and up-to-date information on the technical and regulatory issues that affect the design, application, and certification of CEM systems installed in power plants, cement plants, pulp and paper mills, smelters, and other stationary sources. Written by an international expert in the field, this classic reference guide covers U.S. and international CEM regulatory requirements, analytical techniques, operation and maintenance of CEM instrumentation, and more. The fully revised third edition remains the most comprehensive source of CEM information available, featuring three brand-new chapters on mercury monitoring, the reporting and certification of industrial greenhouse gas emissions, and the instrumentation and methods used to measure air toxic compounds including dioxins, furans, and hydrogen chloride. Thoroughly updated chapters discuss topics such as flow rate monitors, new EPA regulations, instrumentation and calibration techniques, CEM system control and data acquisition, and extractive system design. Providing environmental professionals with the knowledge of CEM systems necessary to address the present-day regulatory environment, Continuous Emission Monitoring: Discusses how CEM systems work, their advantages and limitations, and the regulatory requirements governing their operation Covers both the historical framework and technological basis of current CEM regulatory programs and standards in the United States, Canada, Europe, and Asia Offers practical guidance on sampling system selection, measurement techniques, advanced monitoring approaches, recordkeeping, and quality assurance Provides detailed technical descriptions of the technology necessary for regulatory compliance Includes new orthographic drawings to help instrument technicians and regulators with little technical background to easily understand key topics Continuous Emission Monitoring, Third Edition is an essential resource for professionals responsible for ensuring regulatory compliance, managers and technicians who purchase, operate, and

maintain CEM instrumentation, regulatory personnel who write and enforce operating permits, and instructors and students in upper-level environmental engineering programs."--
