

1. Record Nr.	UNINA9910451621303321
Titolo	Fluid flows to black holes [[electronic resource]] : a tribute to S. Chandrasekhar on his birth centenary // editors, D.J. Saikia, Virginia Trimble
Pubbl/distr/stampa	Singapore, : World Scientific Pub. Co., 2011
ISBN	1-280-66981-0 9786613646743 981-4374-77-6
Descrizione fisica	1 online resource (310 p.)
Altri autori (Persone)	SaikiaD. J TrimbleVirginia ChandrasekharS
Disciplina	523.8875
Soggetti	Black holes (Astronomy) Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Chandrasekhar Centennial Symposium (October 15-17, 2010); Preface; International Planning Committee; Speakers at the Symposium; Contents; Chandra: A biographical portrait Kameshwar C. Wali; Lahore and Madras, 1910 25; Presidency College, 1925 30; Cambridge and Copenhagen, 1930 33; A fellowship and an encounter, 1933 36; A voyage to the New World, 1936; Williams Bay and Chicago, 1937 95; The judgment of posterity; References; Chandrasekhar's role in 20th-century science Freeman Dyson; Basic science and derived science; A sea change; The decline and fall of Aristotle New ideas confront the old order From stellar structure to Shakespeare; References; Chandrasekhar and the legacy of Ramanujan G. Srinivasan; 1. Introduction; 2. Ramanujan Institute; 3. The Goddess of Namakkal; 4. The Lost Notebook; 5. Ramanujan as an inspiration; Chandra's influence on Indian astronomy Jayant V. Narlikar; 1. Introduction; 2. The 1930's and 1940's; 3. Alumni of Osmania University; 4. Indian graduate students; 5. From white dwarfs to neutron stars and the Sun; 6. Antonov instability; 7. Concluding remarks; References;

Chandrasekhar and the history of astronomy Virginia Trimble

1. The fate of famous scientists 2. Degenerate stars, or, who discovered the Chandrasekhar limit?; 3. Chandrasekhar and Eddington; 4. In their own words (and deeds); References; Compact stars and the evolution of binary systems E. P. J. van den Heuvel; 1. Introduction; 2. Type Ia supernova scenarios; 2.1 The Single Degenerate model and its problems; 2.2 The relative importance of the SD and the DD scenarios for the Type Ia SN rate in galaxies
3. Formation processes for neutron stars in binaries: Evidence for two different NS formation mechanisms, yielding different neutron star masses and kick velocities 3.1 Two classes of B-emission X-ray binaries; 3.2 Double neutron stars and their formation history: evidence that low kick velocities are related to low neutron star masses; 3.3 A correlation between a small velocity kick and a low mass of the neutron star in double neutron star systems; 3.4 Formation mechanisms of neutron stars and possible resulting kicks; 3.5 Why are there no low-velocity, young, single radio pulsars?
3.6 Consequences for the occurrence of neutron star formation by Accretion-Induced Collapse (AIC) 3.7 Massive neutron stars in binaries: A third type of neutron star?; 3.8 Discussion; some further consequences of the model; 3.9 Summary; Acknowledgments; References; Stability of relativistic stars John L. Friedman and Nikolaos Stergioulas; 1. Introduction; 2. Action and canonical energy; 3. Local stability; 3.1 Convective instability due to differential rotation: The Solberg criterion; 4. Instability to collapse: Turning point criterion; Turning point instability
5. Nonaxisymmetric instabilities

Sommario/riassunto

This unique book contains a biographical portrait, accounts of Chandrasekhar's role and impact on modern science, historical perspectives and personal reminiscences, several of which appeared in *Physics Today*, and reviews by leading experts in areas which Prof. Chandrasekhar pioneered. The reviews, which appeared in the *Bulletin of the Astronomical Society of India*, are either based on papers presented by scholars in the Chandrasekhar Centennial Symposium at the University of Chicago during 15-17 October 2010, or were additional reviews covering topics not represented at the conference
