

**Sreenivasan, Katepalli R.**

**Chandrasekhar's fluid dynamics.** (English) [\[Zbl 1412.76003\]](#)

Davis, Stephen H. (ed.) et al., Annual review of fluid mechanics. Vol. 51. Palo Alto, CA: Annual Reviews. Annu. Rev. Fluid Mech. 51, 1-24 (2019).

Summary: Subrahmanyan Chandrasekhar (1910–1995) is justly famous for his lasting contributions to topics such as white dwarfs and black holes (which led to his Nobel Prize), stellar structure and dynamics, general relativity, and other facets of astrophysics. He also devoted some dozen or so of his prime years to fluid dynamics, especially stability and turbulence, and made important contributions. Yet in most assessments of his science, far less attention is paid to his fluid dynamics work because it is dwarfed by other, more prominent work. Even within the fluid dynamics community, his extensive research on turbulence and other problems of fluid dynamics is not well known. This review is a brief assessment of that work. After a few biographical remarks, I recapitulate and assess the essential parts of this work, putting my remarks in the context of times and people with whom Chandrasekhar interacted. I offer a few comments in perspective on how he came to work on turbulence and stability problems, on how he viewed science as an aesthetic activity, and on how one's place in history gets defined.

For the entire collection see [\[Zbl 1408.76005\]](#).

**MSC:**

- 76–03 History of fluid mechanics
- 76E20 Stability and instability of geophysical and astrophysical flows
- 76Fxx Turbulence
- 01A70 Biographies, obituaries, personalia, bibliographies
- 01A60 History of mathematics in the 20th century

Cited in 1 Document

**Keywords:**

S. Chandrasekhar; hydrodynamic and hydromagnetic stability; fluid turbulence; MHD turbulence; history of science; biography

**Biographic references:**

[Chandrasekhar, Subrahmanyan](#)

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