

Sabine Hossenfelder

Background on the physicist and science YouTuber

Sabine Hossenfelder is a German theoretical physicist, author, and science YouTuber, born September 18, 1976, in Frankfurt.

Academic Background

She earned a diploma from Goethe University Frankfurt in 1997 and a doctorate there in 2003, with a thesis on black holes in extra dimensions. Her career took her through postdoctoral positions at the GSI Helmholtz Centre, the University of Arizona, UC Santa Barbara, and the Perimeter Institute in Canada, followed by an assistant professorship at NORDITA (2009–2015) and a research fellowship at the Frankfurt Institute for Advanced Studies (2015–2023). She later worked at LMU Munich's Munich Center for Mathematical Philosophy. Her research focuses on quantum gravity and black holes, and she has published more than 80 research papers spanning cosmology, quantum foundations, and particle physics.

YouTube Career

She started a YouTube channel in 2007 but it wasn't very active until the COVID-19 pandemic, when — unable to work in her office — she rebranded it as "Science without the gobbledygook" and began producing regular science-explainer content. The channel (now often called "Science with Sabine") has since grown to over 1.7 million subscribers with around 293 million total views. Videos currently come out about five times a week, covering physics, technology, and broader science news, often with a skeptical eye toward hype in reporting.

Writing

She's the author of two popular books — *Lost in Math: How Beauty Leads Physics Astray* (2018), which criticizes the field's overreliance on mathematical elegance as a guide to truth, and *Existential Physics: A Scientist's Guide to Life's Biggest Questions* (2022). Her writing has also appeared in *Scientific American*, *Nautilus*, *The New York Times*, and *The Guardian*.

Reputation

She's known for pointed, often controversial criticism of trends in modern physics research — for example, questioning the search for a "theory of everything," the emphasis on beauty/elegance in theoretical physics, and some mainstream approaches to dark matter. This contrarian streak has made her a somewhat polarizing but widely followed voice in physics communication.