

Mehran Kardar Biography

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Mehran Kardar (مهران کاردار, August 1957—) was born in Tehran, Iran, the son of Shokrallah Kardar, a mathematics teacher, and Ghodsi Motamen, an English teacher. There, he attended the Andisheh Don Bosco school for primary through high school.

Kardar left Tehran in 1975 and joined King's College at Cambridge University in 1976, where he completed a B.A. in Natural Sciences in 1979. He then pursued graduate studies at the Massachusetts Institute of Technology (MIT), where he obtained a PhD in 1983 for a thesis entitled *Ordering phenomena under competing interactions in adsorbed layers and in spin systems*, completed under the supervision of Nihat Berker. From 1983 to 1986, he was a junior fellow at Harvard University Society of Fellows and a Summer Visiting Research Collaborator in the Theoretical Physics group at Brookhaven National Laboratories. He joined the MIT physics faculty in 1986 as assistant professor, and then climbed the academic ranks (Associate Professor in 1990, tenured in 1992, Professor in 1996, Francis Freidman Professor in 2011).

Kardar trained as a statistical physicist with a focus on disordered systems, and during his graduate years he was exposed both to the replica method and to spin glasses. Disordered systems remained a dominant theme of his subsequent career. In parallel, his lecture notes for the MIT courses on statistical physics have circulated broadly within the physics community. They were finally published as a pair of seminal textbooks in 2007, *Statistical Physics of Particles* and *Statistical Physics of Fields*.

Kardar is a fellow of the American Physical Society (2007), of the American Academy of Arts and Sciences (2008), and a member of the National Academy of Sciences (2018). For his research, he notably received a Sloan Fellowship (1987-1991), a Presidential Young Investigator Award (1989), a John Simon Guggenheim Fellowship (2001), and a Simons Fellowship in Mathematics and Theoretical Physics (2020). He has also been granted various recognitions for his teaching, including the MIT Physics Graduate Student Departmental Teaching Award (1990), the MIT Physics Beuchner Teaching Prize (1992), the MIT School of Science Prize in Graduate Teaching (1993), and the American Association of Physics Teachers John David Jackson Excellence in Graduate Physics Education Award (2009).