

Krishna Rajagopal is a Professor of Physics and a MacVicar Faculty Fellow at the Massachusetts Institute of Technology. He currently serves as the Chair of the MIT Faculty. He was previously the Associate Head of the MIT Department of Physics, responsible for the stewardship of all of its educational efforts, from freshmen through Ph.D., including facilitating its new online educational initiatives. He is a theoretical physicist who asks how the quarks that in ordinary matter are confined within protons and neutrons behave in extraordinary conditions, conditions that provide a testbed for understanding how a complex world can emerge from simple underlying laws. His work links nuclear and particle physics, condensed matter physics, astrophysics and string theory. He analyzes the properties of the hot quark soup that filled the microseconds old universe and that is recreated in heavy ion collisions by seeing how they emerge from the elementary forces between quarks and via repurposing techniques from string theory to understand how hot quark soup is created and probed in high energy collisions. His work has also illuminated the cold, dense, quark matter that may lie in the centers of neutron stars, showing that matter at the highest densities imaginable is a transparent superconductor. And, he has made predictions for the phase diagram of quark matter, hot and cold, and has helped to define the experimental program at RHIC that is currently mapping it. He is a Fellow of the APS and has been active in the APS DNP. He serves on the RHIC PAC and has served on three NSAC subcommittees and the NRC Decadal Survey of Nuclear Physics. He was a DOE Outstanding Junior Investigator and a Sloan Fellow. He is the author of about 100 papers and one book and has mentored more than two dozen PhD students and postdocs. His work has been cited almost 15,000 times and his h is 47. All of his classroom teaching has been at the freshman to junior level, and he has won the highest undergraduate teaching award at MIT. He most enjoys opening eyes to powerful and far-reaching ways of understanding the natural and technological world around us. He received his Ph.D. from Princeton in 1993 and was a Junior Fellow at Harvard and a Fairchild Fellow at Caltech before joining the MIT faculty in 1997.