

Mathematical & Physical Sciences Division

With a full-time faculty of about 160, the Division of Mathematical & Physical Sciences seeks to expand our physical and mathematical understanding of the universe, from its microscopic substructure to its largest expanse, from our own Earth to the edge of the universe and the beginning of time. Discovery and understanding advance by the interplay between theory and experiment or observation, while mathematics provides the underpinning for this work.

Our overall philosophy is that curiosity is our birthright as human beings — and every student has the capacity to explore scientific topics. By cultivating the skills to investigate and analyze our world, we create responses to fundamental questions. Encompassing four academic departments and the UC K–12 science teacher training program CalTeach (<http://calteach.berkeley.edu/cal-teach-program/>), the Division of Mathematical & Physical Sciences empowers scientists at all stages of their careers, from first-year students discovering the illuminating power of math to Nobel laureates shedding light on the universe and all its contents.

Undergraduate majors include Applied Mathematics (<https://guide.berkeley.edu/archive/2024-25/undergraduate/degree-programs/applied-mathematics/>), Astrophysics (<https://guide.berkeley.edu/archive/2024-25/undergraduate/degree-programs/astrophysics/>), Earth and Planetary Science (<https://guide.berkeley.edu/archive/2024-25/undergraduate/degree-programs/earth-planetary-science/>), Geology (<https://guide.berkeley.edu/archive/2024-25/undergraduate/degree-programs/geology/>), Geophysics (<https://guide.berkeley.edu/archive/2024-25/undergraduate/degree-programs/geophysics/>), Mathematics (<https://guide.berkeley.edu/archive/2024-25/undergraduate/degree-programs/mathematics/>), and Physics (<https://guide.berkeley.edu/archive/2024-25/undergraduate/degree-programs/physics/>). Undergraduates are encouraged to participate in research with faculty in all disciplines.