

Center for Advanced Mathematical Sciences (CAMS)

The American University of Beirut has established the Center for Advanced Mathematical Sciences (CAMS), the first such center among the institutions of higher learning in the Arab world. Given the seminal historical role of the Arab Middle East in the development of mathematics and astronomy, it is only natural for the region to have such a center dedicated to advanced teaching and research. The establishment of the center is also especially timely, in view of the significant scientific talent in the region and among its Diaspora, and in view of the central importance of mathematical inquiry to the region's scientific, technological, and economic development.

Director

Wafic Sabra

CAMS Fellows

Paul Atie, Computer Science
Kamal Khuri-Makdisi, Pure Mathematics
Fadl Moukalled, Mechanical Engineering
Wafic Sabra, Theoretical Physics
Jihad Touma, Applied Mathematics

International Advisory Committee

Sir Michael Atiyah (Chairman), University of Edinburgh, UK
L. Alvarez-Gaume, CERN, Geneva, Switzerland
J.P. Bourguignon, IHES, Bures-sur-Yvette, France; Ecole Polytechnique, Paris, France
R. Dijkgraaf, University of Amsterdam, Netherlands
P. Griffiths, IAS, Princeton, USA
N. Khuri, Rockefeller University, New York, USA
Sir James Mirrlees, Trinity College, Cambridge, UK
D. Zagier, MPI Bonn, Germany; College de France, France

In addition to their scientific distinction, members of the International Advisory Committee are highly experienced scientific leaders and have been involved in the administration of some of the world's top academic institutions in Europe and USA. The International Advisory Committee's main task is to advise the president of AUB and the director of CAMS on policies, fundraising, appointments of fellows, and scientific programs.

CAMS Objectives

The Center for Advanced Mathematical Sciences (CAMS) provides a vehicle for promoting research and graduate studies in the mathematical sciences, and a focal point for collaborative research among scientists and mathematicians in Lebanon and the region at large. Its aims are to

- conduct research in the sciences and engineering, with special emphasis on their mathematical aspects. In this regard CAMS acts as a regional research facility in various mathematical sciences such as theoretical physics, pure and applied mathematics, computer science, engineering, and a variety of fields in computational science
- promote and contribute to the graduate programs in the mathematical sciences and engineering at AUB
- promote postdoctoral research and education at AUB and at other local universities, and foster a multi-disciplinary environment encompassing various areas of mathematical science
- assist the university community at large in integrating the use of high performance computing into the various academic and administrative programs by capitalizing on the expertise developed by the scientific and professional staff of CAMS
- identify and pursue promising new fields of science and engineering that might be integrated within CAMS and the University
- act as a focal point for promoting collaborative research among scientists in the region, partly by accommodating visitors for various intervals of time, and also by organizing topical meetings, workshops, and conferences in different fields
- encourage and help promising young students to start on academic careers in mathematical sciences including applied areas crucial to economic growth