Lecture - Tomorrow

Ripples in the Fabric of Space-Time: Unpacking the LIGO Detection of Gravitational Waves

Beirut, Lebanon- 16/3/2016 The Faculty of Arts and Sciences and the Science and Mathematics Education Center (SMEC) at the American University of Beirut (AUB) are organizing a lecture on “Ripples in the Fabric of Space-Time: Unpacking the LIGO Detection of Gravitational Waves,” in the series “Science and Mathematics Goes Public” on **March 17, 2016, at 5:00 pm, in Science Lecture Hall, AUB**.

About the series
This lecture series is a platform for scientists and mathematicians to present their specialized research and their experiences as researchers to a general audience in a non-technical language. The audience - the wider AUB community and beyond - is introduced to new ideas on the frontiers of science and mathematics and is invited to reflect on the process of inquiry that can lead to fascinating new perspectives on ourselves and the world.

The recent LIGO detection of gravitational waves has been hailed as a key milestone in the quest to understand gravitation and further confirmation of Einstein's genius. In this event, three physicists help us go beyond the headlines. They put the detection in the historical context of a century of research on gravitation, explain the recent detection itself and the scientific challenges it posed, and they look forward to what new avenues of exploration have become possible.

Speakers:
Dr. Ali Chamseddine (AUB): 101 years of gravity. The pioneering work of Einstein on General Relativity in 1915 is presented with emphasis on gravitational waves. Various attempts of unifying gravity with the other fundamental interactions are discussed with the aim of developing a quantum theory of gravity.

Dr. Abdel Hussein Mroue (University of Chicago): Gravitational waves: A new window to the universe. On February, 11, 2016, the LIGO collaboration announced to the world the first direct detection of gravitational waves: ripples in space-time predicted by Einstein's theory of general relativity. The source of the signal was the merger of two black-holes at 1.3 billion light years from Earth. In this talk, we discuss the nature of these waves, and we present a summary of the key elements leading to this breakthrough discovery.

Dr. Jihad Touma (AUB): What’s in it for me? Come and find out.

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For more information please contact:
Office of Communications, information@aub.edu.lb, 01-75 96 85

Note to Editors

About AUB

Founded in 1866, the American University of Beirut bases its educational philosophy, standards, and practices on the American liberal arts model of higher education. A teaching-centered research university, AUB has more than 700 full-time faculty members and a student body of about 8,500 students. AUB currently offers more than 130 programs leading to bachelor's, master's, MD, and PhD degrees. It provides medical education and training to students from throughout the region at its Medical Center that includes a full-service 420-bed hospital.

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