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# KMI-Theory Seminar

Thursday, February 16, 2012

4:30 pm, KMI Science Symposia (ES-635)

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“On the Universe acceleration and the zeta function as a regularization tool”

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## Abstract:

The knowledge of the Universe as a whole, its origin, size and shape, its evolution and future, have always intrigued the human mind. Einstein said: "The fact that we can understand the Universe is a wonder." In this seminar, after briefly presenting the historical development, we will address some of the remaining mysteries in our comprehension of the cosmos. Main issue will be the nowadays hot question: What drives the acceleration of the Universe expansion? Dark energy, of course, but what is it? Beautiful mathematics, involving the zeta function of pseudodifferential operators, are key in answering those questions, crucial to understand (or, better, describe, or mathematically modelize) the Universe we live in.