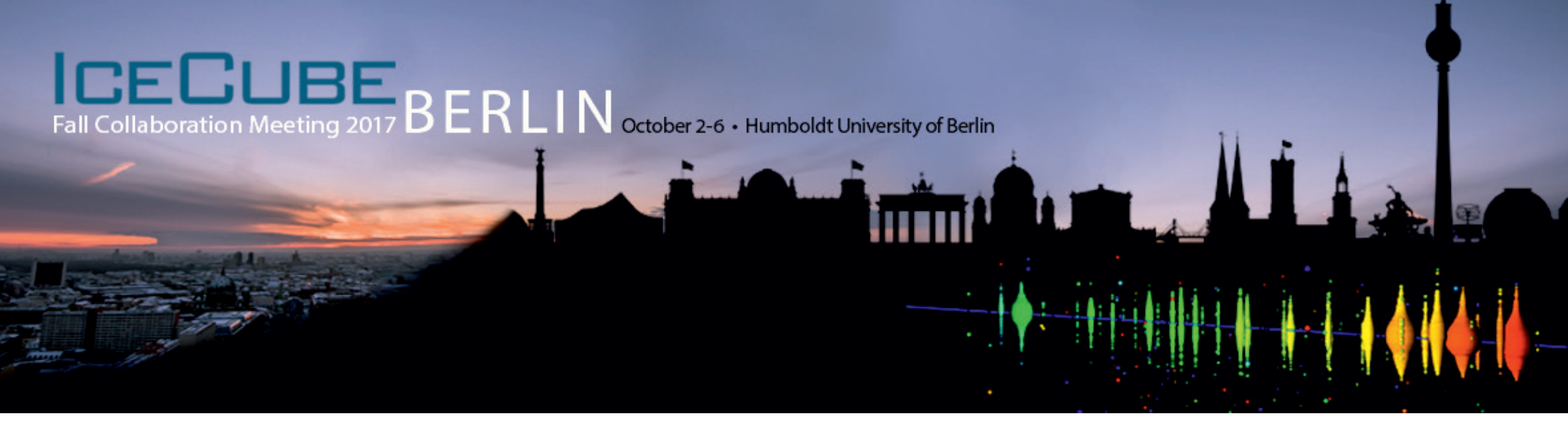

Evening Lecture | 3 October 2017 | 19:00

Prof Dr Francis Halzen
University of Wisconsin-Madison

Building a New Window on the Universe from Antarctica

The IceCube project has transformed a cubic kilometer of natural Antarctic ice into a neutrino detector. The instrument detects more than 100 000 neutrinos per year in the GeV to PeV energy range. Among those, we have isolated a flux of high-energy neutrino of cosmic origin. I will discuss the latest measurements of the cosmic neutrino flux and their implications for its possible origin(s). From the large cosmic flux observed, we conclude that the energy density of neutrinos in the extreme Universe is similar to that of photons. It is therefore evident that the prospects for neutrino astronomy are exceptional and the case for building next-generation neutrino telescopes compelling.

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IceCube

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