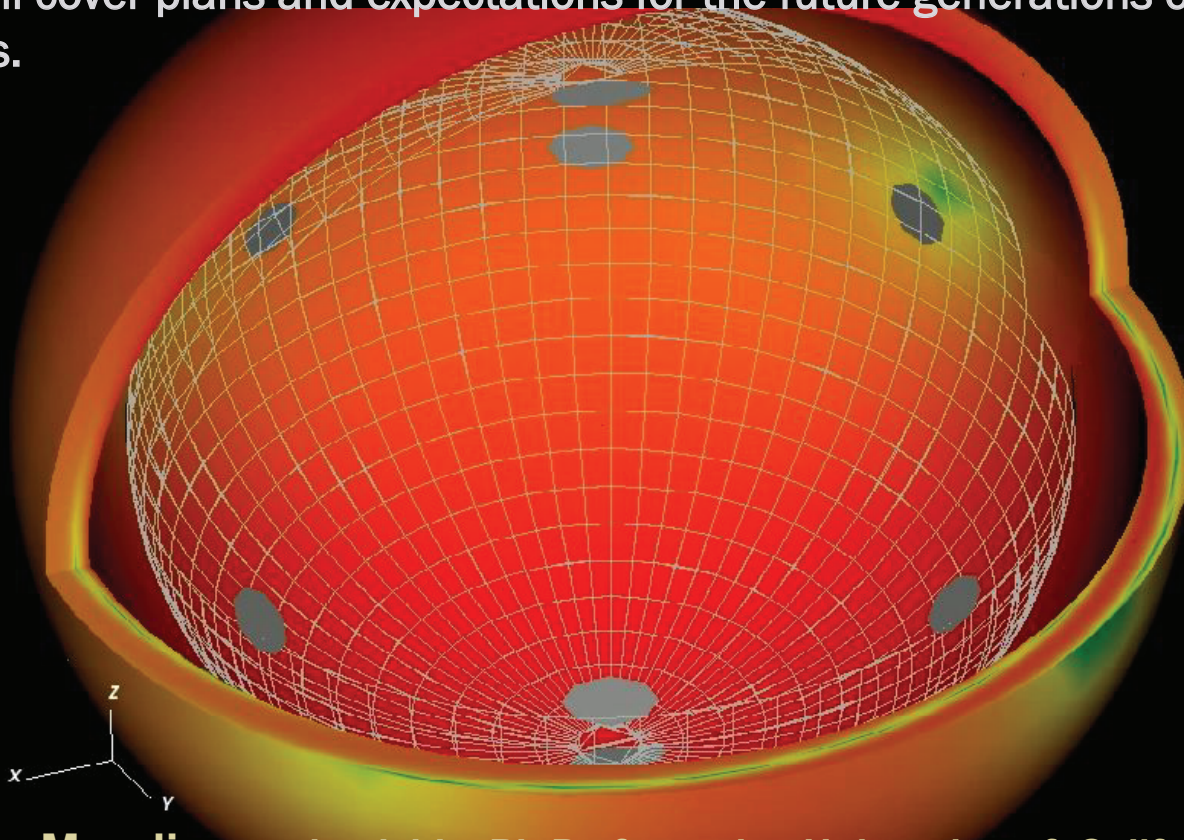


# Vuk Mandic

## “Gravitational-Wave Detectors: First, Second, and Third Generation”

Gravitational waves are predicted by the general theory of relativity to be produced by accelerating mass systems with quadrupole (or higher) moment. The amplitude of gravitational waves is expected to be very small, so the best chance of their direct detection lies with some of the most energetic events in the universe, such as mergers of two neutron stars or black holes, supernova explosions, or the Big Bang itself. Over the past decade several detectors have been built to search for such gravitational-wave sources. This talk will review the current status of these detectors, as well as some of their most recent results, and will cover plans and expectations for the future generations of gravitational-wave detectors.



**Vuk Mandic** received his Ph.D. from the University of California, Berkeley in 2004, on the Cryogenic Dark Matter Search (CDMS) experiment. Between 2004 and 2007, he held the Millikan postdoctoral fellowship at Caltech, where he worked on the Laser Interferometer Gravitational-Wave Observatory (LIGO) experiment. In 2007 he accepted an assistant professor position at the University of Minnesota, where he was awarded the McKnight Professorship in 2010. His research interests include both LIGO and CDMS experiments.

**Wednesday, November 2, 2011 | 3:00 p.m.**

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