The focus of the meeting is to explore scientific frontiers that require large collecting area and state of the art instrumentation over the next 5 to 15 years. It is expected that transformational science will involve a mixture of large-scale surveys, including those that go beyond the current ALFA surveys, and long-term monitoring, such as the timing of millisecond pulsars to detect nano-Hertz gravitational waves, as well as targetted projects. The meeting will form the basis for an Arecibo scientific and instrumentation roadmap that takes into account developments in electromagnetic and non-photonic astronomy and, in particular, development of the Square Kilometer Array.

Topics to be covered:
- PULSARS & FUNDAMENTAL PHYSICS
- COSMOLOGY & GALAXY EVOLUTION
- GALACTIC STRUCTURE FORMATION & EVOLUTION
- PRECISION ASTROMETRY & HIGH RESOLUTION CONTEXTS
- TRANSIENTS & SETI
- NEAR-EARTH OBJECTS & THE ARECIBO RADAR
- EXPLOITING ARECIBO’S BREADTH of CAPABILITY
- INSTRUMENTATION DEVELOPMENT

Scientific Organising Committee:
Murray Lewis (Chair), Chris Salter (Secretary), Chris Carilli, Lynn Carter, Jim Cordes, Colin Lonsdale, Lee Mundy, Snezana Stanimirovic, Russ Taylor, and Ira Wasserman.

Contact: future@naic.edu  http://www.naic.edu/~astro/frontiers/