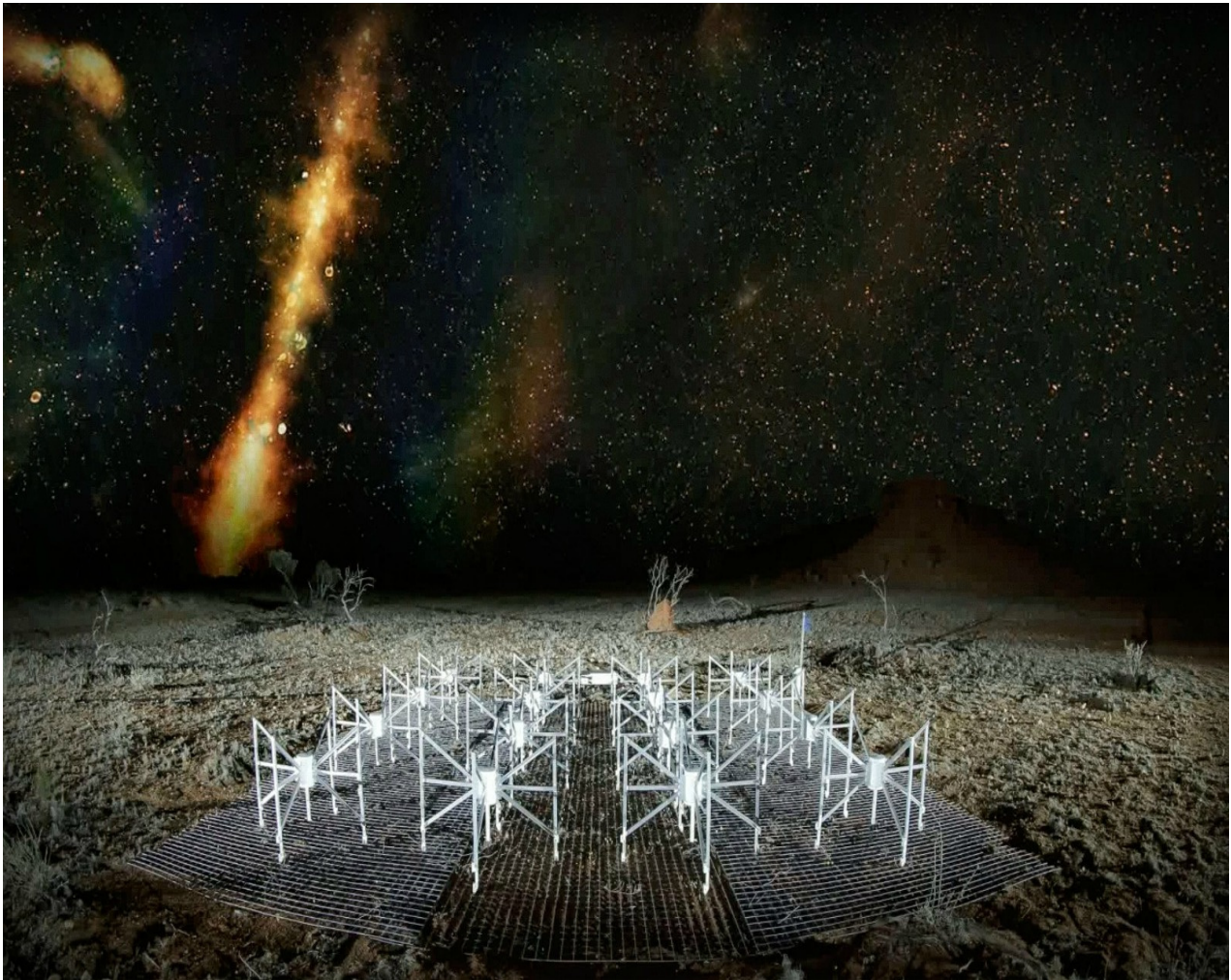


The Virgin Islands Consortium

UVI To Host Two Astronomy Conferences Showcasing Major Discoveries

Education / **Published On June 01, 2017 09:54 PM /**

Staff **June 01, 2017**



The University of the Virgin Islands' College of Science and Mathematics, together with the Etelman Observatory, are organizing two upcoming astronomy conferences this summer. The first one, "Generation-GW: Diving into Gravitational Waves" will take place from June 5-9. The second conference, "Unveiling the Physics Behind Extreme AGN Variability" will take place from July 11-14. Both conferences will facilitate discussions about crucial breakthroughs in the field of astronomy over the last few years.

"We are establishing a legacy, and these events will improve the recruitment of Virgin Islands students to study physics and astronomy at UVI," said Dr. Antonino Cucchiara, assistant professor of physics. "The conferences will also demonstrate how research and

activities undertaken at UVI can benefit the community.”

The scientific breakthrough to be discussed by groups of international astrophysicists from around the world at the June conference is “Gravitational Waves.” Widely considered to be the greatest discovery of 21st century astronomy, this phenomenon describes ripples in the curvature of space-time that propagate at the speed of light, outward from their source.

The other discovery to be discussed by more than 50 astronomers at the July conference is Fast Variable Active Galactic Nuclei (AGN). The center of every galaxy has a ‘super massive black hole’ which is millions of times heavier than our sun. Everything that gets too close to it or falls in is destroyed, explained Cucchiara. That destruction produces energy that is observable in optical, X-ray, gamma-ray radiation – producing an AGN. The July conference will focus on Fast Variable AGNs, which radiation changes quickly in time and are therefore difficult to observe in detail.

Both conferences will include an undergraduate mentoring component with question and answer sessions, as well as a talk that will be open to the public. The public talk for the June conference is set for 7 p.m. on Thursday, June 8, in the Administration and Conference Center (ACC). It will feature Professor Alberto Sesana from the University of Birmingham in the United Kingdom, and Professor Jillian Bellovary from Queensborough Community College in New York. The public talk in July will also be held on a Thursday; details to be announced.

“UVI and the Etelman Observatory are establishing a path forward to become an astronomy research hub,” said Cucchiara. “It is important for us to involve not just UVI physics faculty, but also international partners, undergraduate researchers and federal agencies.” Eight UVI students will be at the National Aeronautics and Space Administration (NASA) working on a variety of projects, from building the new generation of “microsatellite,” to studying planets around other stars, to studying the most powerful stellar explosions known in the Universe. Some of these projects relate to research that is currently being pursued at UVI, representing the strong connection between both institutions.