UC SANTA BARBARA

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A Science Diplomat

Ben Monreal, an assistant professor of physics at UC Santa Barbara, has new Nobel laureate Arthur D. McDonald to thank for his career focus on neutrinos. Prior to joining the faculty, Monreal was a postdoctoral student working with McDonald at the Sudbury Neutrino Observatory in Ontario, Canada — a giant solar neutrino detector.

McDonald shares the 2015 Nobel Prize in Physics for his research that proved neutrinos have mass. The second-most abundant particles in the universe, neutrinos lack an electric charge and are produced by the decay of radioactive elements.

While Monreal's work at SNOLAB — as the neutrino observatory is more commonly known — came after McDonald had compiled the data cited by the Nobel committee, years later Monreal and a group of very close-knit colleagues were still rechecking the original data.

Monreal remembers McDonald, a professor emeritus at Queen's University in Kingston, Ontario, as very easy to get along with. "He was very supportive of young people like me working on this experiment," he recalled. "He really made things happen and kept everybody happy. He wasn't a taskmaster but he definitely got things done."

Monreal's work on neutrino physics builds on McDonald's prize-winning research. Monreal is part of the KArlsruhe TRItium Neutrino experiment (KATRIN), which seeks to measure the mass of a neutrino. In fact, he was at a meeting in Germany of

KATRIN collaborators when the Nobel Prize in Physics was announced earlier today. According to Monreal, the community of neutrino physicists was thrilled for McDonald.

“In addition to being really good at physics, Art is an expert in science diplomacy,” Monreal said. “He is able to combine science and interpersonal relations in a unique way.”

About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.