

Dante Amidei

Class of 1974

- Full Professor in the Department of Physics at the University of Michigan
- Fellow of the American Physical Society
- A World Leading Expert on the Top Quark



Dan Amidei believes that physics “...provides the foundation for solving both cosmic mysteries and practical problems.” His work in both his classroom and laboratory demonstrates that we can understand the larger concepts of nature by breaking them down into increasingly smaller parts. Dan’s work in collaboration with hundreds of scientists around the world left a mark on two great quests of the last 30 years in particle physics. Dan coordinated the construction and use of the world’s first silicon vertex detector at Fermilab, and showed it could be used to tag b-quarks, leading to the discovery of the top quark in 1995. The further evolution of silicon detectors led to much larger versions that were used at CERN in Switzerland to reveal the presence of the elusive Higgs boson, the origin of mass, in 2012. For his pioneering contributions to the development of b-quark tagging and its application to the discovery of the top quark, Dan was named as a Fellow of the American Physical Society in 2007.

Professor Amidei is also a master teacher who truly enjoys making the complex simple. Through undergraduate courses, Saturday Morning Physics Seminars, and mentoring individual PhD candidates, he strives to help students appreciate the history of the Epic since the Big Bang—or as he says, “why there is something instead of nothing.” Well-organized and witty, Dan continues to develop new curricula including an advanced laboratory with one-of-a-kind cutting edge experiments for Physics majors which can be thrilling yet also very vexing. He has created an introductory physics sequence for University of Michigan architecture students—the Physics of Architecture and Design. While his ultimate contribution to humanity may be somewhere down the road, his service to continuing the exploration of our universe makes him a modern explorer of the first rank.

As Dan has stated, “Physics is like romance—You meet a measurement that’s really fascinating but you don’t know how it’s going to work out at the end...but it’s so fascinating you know, that you just keep going.”

Inducted October 3, 2019