

QuarkNet



A STEM Education Tool to Help Develop America's Technological Workforce

QuarkNet gives science education a competitive edge by putting schools across the United States at the research frontier. The nationally funded program connects students and teachers with physicists at universities and national laboratories to enhance high school physics education and prepare the next generation of scientists and engineers.

QuarkNet pairs teachers with physicists to conduct real research, enabling teachers to bring authenticity and excitement to classroom activities. The program provides teaching resources to include particle physics in lessons on subjects such as momentum and energy. Using QuarkNet's cosmic ray detectors, teachers can engage their students in scientific investigations.

Students learn how research in this international field has expanded our understanding of the universe and led to technological advances in the fields of healthcare, security and computing. Students from rural, inner city and suburban schools learn about job opportunities in physics, computing and engineering. They learn skills needed to compete in global, cutting-edge research fields such as how to work in scientific collaborations and share data with students in other countries. QuarkNet has motivated numerous students to pursue careers in science, technology, engineering and mathematics.

STEM Education Contributions – 2016 Academic Year

Resources for teachers

Teachers receiving continuing education	607
Volunteer mentors	82
QuarkNet Centers	52
States participating (incl. Puerto Rico)	28

Hands-on Opportunities for Students

Masterclasses	582
Student research groups using e-Labs	1066
Summer research participants	159
Cosmic-ray detectors in QuarkNet high schools	176
Days worth of data uploaded	8829
States participating (incl. Puerto Rico)	28

For more information visit quarknet.i2u2.org

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