With seven of its former pupils having gone on to win a Nobel Prize for Physics, the Bronx High School of Science is no ordinary school.

Robert P Crease finds out why

Every morning about 3000 students at the Bronx High School of Science in New York pass beneath a huge mosaic that hangs over the school’s entrance. It shows a Moses-like figure – representing “the humanities” – rising over a rainbow, beneath which are tile depictions of Pythagoras’s theorem, surveying gear, a Benjamin Franklin-like key and kite, and more old stuff. The students rushing to class hardly notice. They are into calculus, photodetectors and robots.

On 15 October this year, Bronx Science, as it is colloquially known, was officially designated a “historic physics site” in a ceremony organized by the American Physical Society (APS). The high school joins an imposing list of 18 other landmarks with that status. They include Bell Labs in New Jersey, where the transistor was discovered, the Massachusetts Institute of Technology’s Radiation Laboratory, which helped to develop radar, the University of Chicago site where Robert Milikan measured the charge on the electron, and the spot outside Cleveland, Ohio, where Albert Michelson and Edward Morley did their epochal ether-drift experiment.

Located in the northwest corner of New York City, Bronx Science owes its historic status to the fact that seven future Nobel-prize-winning physicists went through its doors – more than any other high school in the world and more than most countries have ever achieved. The school, which opened in 1938, was founded by the educator Morris Meister, who believed that if a school put bright students together, it would kindle ill-defined but valuable learning processes. The school seems to have proved him right: according to the Bronx laureates, their physics learning took place mainly outside the classroom.

Roy Glauber, who shared the 2005 Nobel prize for his work on quantum optics, entered in 1938 in the school’s initial class. The first physics course was not taught until 1939, and its textbook did not even say that atoms contained neutrons, despite their discovery in 1932.

A Bronx mathematics teacher changed Glauber’s life by giving him a book on calculus for summer reading, and the sopho-