

Professor Min Chen

1983 – Present: Professor of Physics, MIT

1975 – 1982: Associate Professor, MIT

1970 – 1975: Assistant Professor, MIT

1969: Ph. D. University of California, Berkeley

Major Contributions

1970: personally, designed to build a precision vertical bending double arm mass spectrometer, later leading to the discovery of the J-particle, not predicted by theory.

1974: first eliminates the background to find the sharp J-particle peak, showing the composite properties of a new heavy (Charm) quark-antiquark composite system, establishing the quark model that quarks are the basic building block of everything in the universe.

1976: invited to participate in the Nobel Prize ceremony for the experimental group leader Prof. S. C. C. Ting due to the discovery of J-particle.

1979: developed a new mathematical method to calculate the energy distribution of the hadrons produced by high energy positive and negative electron collisions, leading to the discovery of 3-jets and the carrier of the Nuclear forces, the Gluons.

1983: Fellow of Guggenheim Memorial Foundation.

1995: European Institute of Physics Nuclear Force carrier – Group Gluon Discovery Award.

2003: Launching the study of the backward Cherenkov radiation using man-made left-hand material.

2010: The backward Cherenkov radiation paper won the best paper award from the IEEE International Electromagnetism Application Conference.

2012: Invited by the President of Taiwan University to participate in the assessment of university academic courses.

2013: Awarded Outstanding Contribution Award for Academic Course Evaluation of Department of Physics and Astronomy, Shanghai Jiao tong University.

2013: Introduced the MIT-edX course to Taiwan and invited 14 well-known Taiwanese educators to MIT to learn MIT's MOOCs.

2014: Phi-Tau-Phi Academic Honors Award.

2013-2014-2015-2016, lectured at the University of Macau, Tunghai University, Electronic Science and Technology University, Zhejiang University on 1) Science and Humanities; 2) Methods of Major Scientific Discoveries; 3) Method of Developing the Standard Theory, and 4) Network teaching Methods.

Patents and publications:

1994-now: Owning many patents in China, Taiwan, the United States and Europe

Publications: about 200 peer reviewed papers and 10 books.