Ca' Foscari
University
of Venice

Nobel lecture series

Carl Wieman

Nobel Laureate in Physics, 2001

Friday, 17th April 2026, h. 10.30 am
Auditorium Danilo Mainardi
Campus Scientifico – Edificio Alfa
Via Torino 155 – Mestre (VE)

The event will be held in English

Confirmation of participation is required

Info
Cultural Promotion Office
eventi@unive.it

Carl Wieman is an Emeritus Professor of Physics and Education at Stanford University. He has been widely recognized for experimental research in both atomic physics (Nobel Prize 2001 and other awards) and university science and engineering education (Carnegie University Professor of the Year 2004, Yidan International Prize for Education Research 2020). Wieman directed the Science Education Initiatives at the Universities of Colorado and British Columbia which produced large scale change in the teaching of science. He also served as Associate Director for Science in the White House Office of Science and Technology Policy from 2010 to 2012. He founded PhET, which provides interactive simulations that are used nearly a million times a day to learn science, and he has written a book "Improving how universities teach science." He has 30+ years of experience teaching and doing research on teaching and learning of science and engineering.

Abstract
Guided by experimental tests of theory and practice, science and engineering has advanced rapidly in the past 500 years. Guided primarily by tradition and dogma, science education has remained largely medieval. Recent research on how people learn, combined with rigorous experiments in university science classrooms, is now revealing much more effective ways to teach and evaluate learning than is currently used in most science and engineering classes. I will discuss these results and what they tell us about principles of learning and their effective implementation in university classrooms. This research is setting the stage for a new approach to teaching that can provide the relevant and effective science education for all students that is needed for the 21st century.

Programme

Institutional greetings
Antonio Marcomini
Deputy Rector
Ca' Foscari University of Venice

Introduced by
Stefano Bonetti
Professor of Condensed Matter Physics
Ca' Foscari University of Venice

Lectio Magistralis
Carl Wieman
Emeritus Professor
of Physics and Education
Stanford University
Taking a scientific approach to science and engineering education