

Taking a Scientific Approach to Science and Engineering Education

Carl Wieman

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Carl Wieman was awarded the Nobel Prize in Physics for his work on Bose-Einstein Condensation, but over the last three decades he has also been applying a scientific approach to something different: improving education.

He will present a public keynote as part of the Physics "New" Faculty Workshop at Monte Verità.



Photo credit: Stanford University

Guided by experimental tests of theory and practice, science and engineering have advanced rapidly in the past 500 years. Guided primarily by tradition and dogma, education in these subjects has remained largely medieval. Recent research on how people learn, combined with careful experiments in university classrooms, is now revealing much more effective ways to teach and evaluate learning than is currently used in most classes. I will discuss these results and what they tell us about principles of learning and their effective implementation in science courses. 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. It also shows better ways to evaluate teaching quality.

Presentation in English with simultaneous translation in Italian.

*Free entrance, reservation requested:
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Partner/Sponsor:  Congressi
Stefano Franscini

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