

David Weitz

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Prof. Dr. David Weitz will present his research on the use of microfluidic techniques for synthesis of new nanoscale materials and for ultra-high throughput bioassays. His group works on soft materials which materials that are easily deformable by external stress, electric or magnetic fields, or even by thermal fluctuations. The goal of his research is to probe and understand the relationship between the structure and dynamics of these materials (both synthetic and biological) at the mesoscopic scale and their physical properties. Their interests extend from fundamental physics to technological applications, from basic materials questions to specific biological problems.

Weitz graduated with a B.Sc. from the University of Waterloo and an A.M. from Harvard University where he also received his PhD in Physics in 1978. He worked as a research physicist at Exxon Research and Engineering for nearly 18 years. He became professor of physics at the University of Pennsylvania in 1995, and returned to Harvard as Gordon McKay Professor of applied physics and physics in 1999. In 2005, he became the Mallinckrodt Professor of physics & applied physics at Harvard University. He is also a professor of systems biology. Additionally, Weitz is the co-director of the BASF Advanced Research Initiative at Harvard, and the director of the Harvard Materials Research Science & Engineering Center.

Weitz is a fellow of the American Physical Society and a member of the National Academy of Sciences and the American Academy of Arts and Sciences. He co-founded several start-up companies and holds a position in the scientific advisory board of different organizations and companies. Besides these activities, he is a member of the PNAS Editorial Board, as well as on the editorial boards of Nature Communications and Lab on a Chip.