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THE TALKS ARE DESIGNED

FOR THE INTERESTED PUBLIC

## **Atomic Legos: Building and Investigating Quantum** Materials One Atom at a Time

## April 10 @ 7:00pm

Harvard University, Science Center Hall D One Oxford Street, Cambridge, MA

## **Markus Greiner**

## **Professor of Physics**

Ultracold atoms offer a fascinating view of the quantum world. With the quantum gas microscope, invented here at Harvard, we take pictures of individual atoms dancing to the rules of quantum mechanics. For example, quantum mechanics allows a single atom to exist in many locations at This so-called "quantum superposition" once. can be directly observed with our microscope. By looking at just one or two atoms, we can gain intuition about this bizarre quantum world. We can then use our ultracold atoms as building blocks to assemble synthetic quantum materials and to explore new states of matter.





HARVARD UNIVERSITY VERI Faculty of Arts and Sciences Division of Science

For more information and to be notified about future events, please contact: science lectures@fas.harvard.edu