



## Kolloquium

Do, den 13.12.2018, **16:00 Uhr, 57-Rotunde**

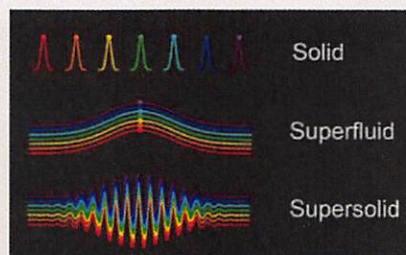
### New forms of matter with ultracold atoms: spin-orbit coupling and supersolidity

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Ultracold atom can be assembled into new forms of matter. The properties of the atoms are profoundly modified with the help of laser beams and magnetic fields. They can modify the wavefunction of neutral atoms in such a way that they show behavior of charged particles, e.g. electrons in high magnetic fields and spin-orbit coupling. This has been used to create a supersolid phase of a Bose-Einstein condensate. A supersolid is superfluid and breaks translational symmetry, i.e. it has shape.



Ab 15:30 werden Kaffee und Kekse angeboten.