Hamburg Photon Science Colloquium

FROM SPECTROSCOPY TO COHERENT CONTROL USING A FREE ELECTRON LASER

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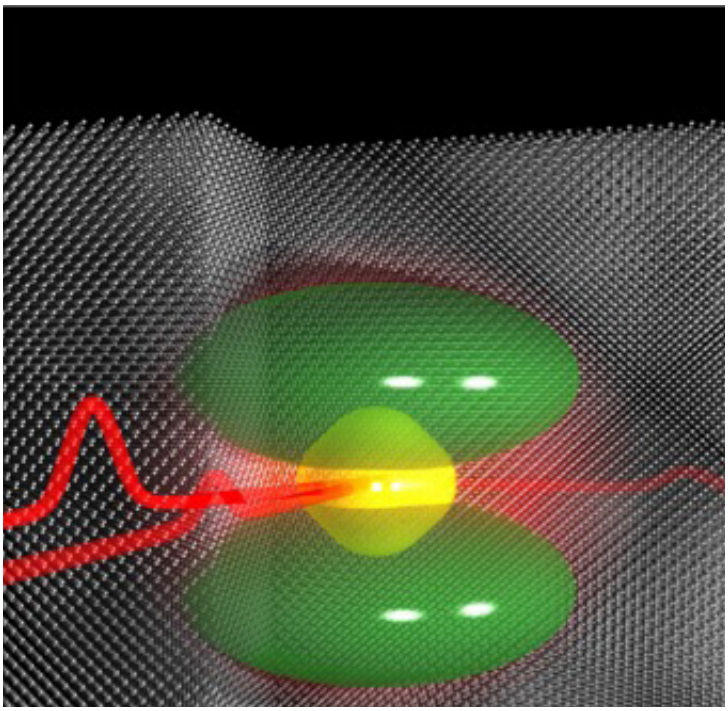
Laser cooling and electromagnetic traps have revolutionized atomic physics, yielding dramatic discoveries from Bose-Einstein condensation to quantum control of single atoms. As it is a semiconductor of extraordinary cleanliness and low cost, silicon can also be thought of a poor man's atom trap. We describe the beginnings of the science of silicon as atom trap, where the trapped atoms are the donor impurities. Free electron lasers have enabled this development, which has included the visualization and manipulation, including the creation of coherent quantum superpositions, of the impurity quantum states.

FRIDAY,
04.12.2015

2:00 PM

CFEL
SEMINAR ROOMS I-III



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