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The Scientific and Award Committees of the biannual Bose–Einstein Conference Series are pleased to announce **Prof. Immanuel Bloch** and **Prof. Markus Greiner** as the recipients of the **BEC Awards 2013**. The awards will be presented at the Bose–Einstein Conference in Sant Feliu, Spain, 7–13 September 2013.

Professor Immanuel Bloch will receive the **senior BEC Award 2013** for *his pioneering experimental contributions to the field of quantum many-body physics with cold atoms in optical lattices*.

Professor Markus Greiner will receive the **junior BEC Award 2013** for *the development of a technique for imaging two-dimensional quantum gases in optical lattices with single-atom resolution*.

Professor Immanuel Bloch is Scientific Director at the Max-Planck-Institute of Quantum Optics, Garching (Germany) and Full Professor at the Ludwig Maximilian University of Munich (Germany). He has made seminal experimental contributions to the field of strongly correlated many-body systems in optical lattices. Starting from the observation, in 2001, of the superfluid-to-Mott-insulator quantum phase transition for bosons in an optical lattice, he studied the collapse and revival of the matter-wave field of a Bose-Einstein condensate in an optical lattice, observed the entanglement dynamics through controlled collisions, and realized a Tonks-Girardeau gas in a one-dimensional lattice. He and his co-workers pioneered noise-correlation measurements for ultracold quantum gases, which led to the observation of bunching and anti-bunching in matter waves. Furthermore they observed and controlled superexchange interactions in optical lattices, and developed a single-atom-resolving fluorescence microscope.

Professor Markus Greiner is Professor of Physics at Harvard University, Cambridge, MA (USA). He and his group have developed a fluorescence microscope for quantum gases in optical lattices. In ground-breaking experiments, they have detected thousands of individual atoms with near-unity fidelity on individual sites of a Hubbard-regime optical lattice. This unprecedented degree of control over a quantum many-body system has opened up an avenue to studying Mott-insulating phases and other strongly correlated quantum phases in optical lattices by locally probing atom-number statistics. More recently, Markus Greiner and his co-workers demonstrated quantum magnetism in an Ising spin chain in an optical lattice and observed a transition from a paramagnet to an anti-ferromagnet.

Committee Members of the BEC awards 2013: Ehud Altman, Eric Cornell, Jean Dalibard, Tilman Esslinger, Gora Shlyapnikov and Ian Spielman

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