



Inside Science Research — Physics News Update

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Physics Stories of 2002

The top two physics stories for the past 12 months were the total accounting of neutrinos from the sun by the Sudbury Neutrino Observatory (SNO), thus solving the solar neutrino problem ([Update 586 \(/pnu/2002/split/586-1.html\)](#)); and the formation and detection of antihydrogen atoms at CERN (Updates [605 \(/pnu/2002/split/605-1.html\)](#) and [611 \(/pnu/2002/split/605-1.html\)](#)). Other notable physics developments for the year include stopping and storing light in a solid (Update [571 \(/pnu/2002/split/571-2.html\)](#)), the observation of phase-transition behavior in nuclei ([572 \(/pnu/2002/split/572-2.html\)](#)), publication of some unsent letters by Niels Bohr to Werner Heisenberg ([576 \(/pnu/2002/split/576-3.html\)](#)), interferometry with C-70 molecules ([579 \(/pnu/2002/split/579-1.html\)](#)), a dispute over "fusion" in sonoluminescence ([579 \(/pnu/2002/split/579-2.html\)](#), [599 \(/pnu/2002/split/599-3.html\)](#)), most precise tests of special relativity ([571 \(/pnu/2002/split/571-1.html\)](#), [590 \(/pnu/2002/split/590-1.html\)](#)), sharper maps of the cosmic microwave background ([591 \(/pnu/2002/split/591-1.html\)](#)), "droplet" of light ([596 \(/pnu/2002/split/596-1.html\)](#)), claims for element 118 retracted ([597 \(/pnu/2002/split/597-2.html\)](#)), verification of the notion that the second law of thermodynamics can be violated on small spacetime intervals ([598 \(/pnu/2002/split/598-1.html\)](#)), high precision measurements of CP violation in B meson decays and in the g-2 factor of the muon ([600 \(/pnu/2002/split/600-1.html\)](#)), scandal at Lucent ([606 \(/pnu/2002/split/606-1.html\)](#)), record high laboratory magnetic fields ([614 \(/pnu/2002/split/614-1.html\)](#)), polarization in the cosmic microwave background detected ([606 \(/pnu/2002/split/606-2.html\)](#)), 2002 Nobel prize for physics ([608 \(/pnu/2002/split/608-1.html\)](#)), noise can improve balance ([612 \(/pnu/2002/split/612-2.html\)](#)), and longest measured atomic lifetime ([616 \(/pnu/2002/split/616-2.html\)](#)). All the year's stories can be retrieved from our archive at the [Physics News Update mainpage \(/pnu\)](#).