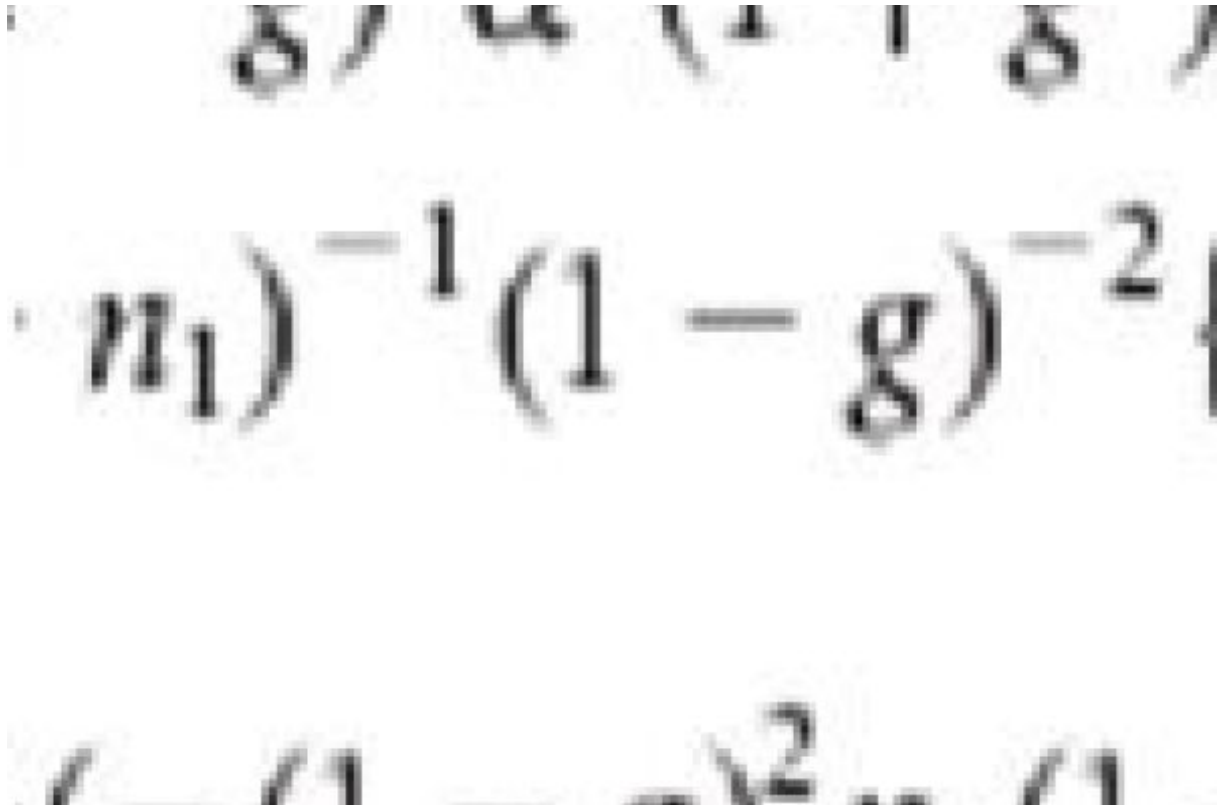




Nature publishes new advancement in Quantum Memory for Light

Part of the work was initiated at the ICFO by Eugene S. Polzik and Ignacio Cirac

November 26, 2004

A new advancement on research about quantum storage of light has been achieved. The research has been published this week in *Nature* by Eugene S. Polzik from the Niels Bohr Institute (Denmark), Ignacio Cirac from Max Planck Institute for Quantum Optics (Germany) - both Distinguished Invited Professors at ICFO-, Brian Julsgard and Jacob Sherson from the Niels Bohr Institute (Denmark), and Jaromir Fiurasek from QUIC, Ecole Polytechnique, Université Libre de Bruxelles, (Belgium).

The authors propose and experimentally demonstrate a new protocol for a quantum memory based on atomic ensembles. Recording of an externally provided quantum state of light onto the atomic quantum memory is achieved with 70 per cent fidelity, significantly higher than

the limit for classical recording.

Part of this research was initiated at the ICFO-Institute of Photonic Sciences, in Barcelona.

Follow the link to [Nature](#) to read the complete article