NEWS

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For Immediate Release: March 24, 2009 **Contact: Kristi Pollard** **970.248.1410**
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Mesa State to Host Physics Seminar Series

Grand Junction – On Thursday, March 26th, Mesa State College's Physics Department will host Dr. Dietrich Leibfried of the National Institute of Standards and Technology (NIST) out of Boulder, Colorado as he speaks on "Quantum Information Processing with Trapped Ions."

What: "Quantum Information Processing with Trapped Ions"
When: Thursday, March 26, 2009
12:30 to 1:15 p.m.
Where: Mesa State College,
Academic Classroom Building, Rm. 110

"Quantum information processing promises the possibility of processing information in ways that are fundamentally unavailable to conventional computing devices," stated David Collins, Mesa State College Professor of Physics. "Quantum computers could be used to factorize large numbers, break encryption schemes and search databases far more rapidly than any type of conventional computer. However, building a useful quantum computer remains a formidable technical challenge with existing efforts limited to small-scale devices."

Dr. Leibfried will introduce the basic ideas behind quantum information processing with emphasis on trapped ions, give a survey of recent progress in implementing simple quantum algorithms and describe the efforts in scaling up towards a large scale computing device.

Dr Leibfried has been a Staff Scientist at NIST since 2001, has authored over 80 journal articles and is the recipient of several physics awards.

Contact Kristi Pollard at 970-248-1410 for more information regarding this presentation.

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