



**Trinity Section
American Nuclear Society**

P. O. Box 5367, Albuquerque, NM 87185
<http://local.ans.org/trinity/>

**Rio Grande Chapter
Health Physics Society**

New Mexico
<http://hpschapters.org/riogrande/>



JOINT DINNER MEETING ANNOUNCEMENT

"Experiments with the Dragon Machine"

Speaker: Richard E. Malenfant, LANL (retired).

Abstract: *The statement "tickling the tail of the dragon" has been applied to many things—including the "screwdriver accident" that was fatal to Louis Slotin on May 21, 1946. However, the real story of the Dragon Machine was lost due in part to the increased security of 1945 until the fortuitous discovery of a handwritten wire-bound notebook labeled "July, 1945; 49 Book; ORF" in the bottom drawer of a file safe at Pajarito Site. This presentation will include the origin of the name, a description of the experiments performed, and the significance of the results of those experiments to this day. Participants included many well-known in the Manhattan Project, such as Otto Frisch, Klaus Fuchs, Louis Slotin, Harry Dahlgian, and Philip Morrison. In addition to the details of the experiments, the significance of the observations to the Manhattan Project, and the legacy of the results, will be described. In some ways, the experiments with the Dragon Machine in January, 1945, were of greater importance than the demonstration of a self-sustaining chain reaction with the Chicago Pile in the racquets court at Stagg field in December, 1942.*

Biography: *Dick Malenfant retired from Los Alamos in November, 1996, after nearly 36 years with the Laboratory. Most of his time at Los Alamos was spent at the Los Alamos Critical Experiments Facility at TA-18, Pajarito Site. He was particularly interested in the calculation and measurement of radiation heating and dosimetry on programs including Rover (nuclear rockets), Pluto (nuclear ramjets), and the Hiroshima Dose Reconstruction effort. He worked at the critical experiments facility at the Oak Ridge National Laboratory and in the Propulsion Laboratory at Wright-Patterson Air Force Base before joining Los Alamos. He received a B. Phys. (engineering physics) from the University of Minnesota, an M.S. in physics and math from Ohio State University, and an MBA from the University of New Mexico in addition to course work in physics and math at the University of Tennessee and the University of New Mexico.*

Place: Courtyard by Marriott, Santa Fe

3347 Cerrillos Road, Santa Fe, NM (505-473-2800)

Directions: From Albuquerque, take 1-25 North approximately 55 miles to Exit 278 (Cerrillos Road). Hotel is located 3 miles on the left-hand side of Cerrillos Road at Richards Avenue.

Date: February 25, 2011

Time: 6:00 Social Hour with Cash Bar

7:00 Buffet Dinner (Chicken and Salmon)

7:45 Speaker

Cost: \$30 per person, $\frac{1}{2}$ price for students and children

We strongly encourage you to sign up and pay for this event using our PayPal payment account.

Visit the "Calendar" page of our web site (<http://local.ans.org/trinity/calendar.html>) and select the appropriate payment button. You may use your own credit card and do NOT need to have a PayPal account to make the payment.

RSVP: If you do not use PayPal payment, please RSVP no later than Feb 21st to:
Markku Koskelo: mkoskelo@aquilagroup.com (505-338-8083) or
Bill Flor: wjflor@lanl.gov (505-665-8768).

RSVP must be received by 21 Feb in order to give final numbers to the caterers. While we strongly encourage everyone to use online payment to sign up and prepay, an RSVP is a commitment to attend/pay at the door. We cannot afford "no shows" after the final count is given to the caterers, as the Section is partially subsidizing the cost of this event. If you cancel after 21 Feb, you will still be responsible for paying.