# **Current Meeting**

Our next meeting will be on **Tuesday, November 13, 2018**, 6 p.m. to 9 p.m., in the **Stamm Room, in the Centennial Engineering Center**.

Our speaker will be John A. Panitz, Emeritus Professor of Physics

TITLE: My Life with Erwin: The Beginning of an Atom-Probe Legacy

### **ABSTRACT:**

The Atom-Probe Field Ion Microscope was introduced in 1967. It was, and remains, the only instrument capable of determining the chemical identity of one single atom seen on a metal surface and selected from neighboring atoms at the discretion of the observer. The development of the Atom-Probe is a story of an instrument that one NSF reviewer called "impossible because single atoms could not be detected". It is also a story of my life with Erwin Wilhelm Müller as his graduate student in the Field Emission Laboratory at the Pennsylvania State University in the late 1960s and his strong and volatile personality that arguably cost him the Nobel Prize in Physics, a personality perhaps fostered by his pedigree as Gustav Hertz's student in the Berlin of the 1930s. It is the story that has defined my scientific career.

## BIO:

J. A. Panitz is Emeritus Professor of Physics at the University of New Mexico (UNM) and the founder of <u>High-Field Consultants</u>. He joined UNM in 1988 and during his tenure he was Professor of Physics, High Technology Materials and Cell Biology in the School of Medicine. At UNM he developed Visual E&M the first undergraduate laboratory courseware that encouraged critical thinking and role playing in the structured environment of cooperative learning groups. Professor Panitz was president of the 21 Club from 2008 to 2012.

From 1970 to 1988 Professor Panitz was a member of the technical staff at Sandia National Laboratory in Albuquerque. At Sandia he invented and patented the first field emission immunochemical sensor and the Field Desorption Spectrometer that became the Imaging Atom Probe - the progenitor of commercial atom probes and Atom Probe Tomography.

## **Dinner choices:**

Herb Crusted Chicken Breast

or

Seasonal Vegetable Strudel

(The default choice is Herb Crusted Chicken Breast. If you prefer Seasonal Vegetable Strudel, send an email to Walter Gerstle to indicate your preference.)

with

Chef's choice of starch and fresh vegetable with Salad, Bread, Butter

### **Desserts:**

Strawberry Shortcake or Chocolate Layer Cake

Coffee, Iced Tea, Water

Alcoholic drinks

As always, you can register for the meeting simply by paying for the dinner, etc. using the Paypal application, which is included for your convenience on the 21 Club website (<a href="http://21club.unm.edu/">http://21club.unm.edu/</a>), or you can simply mail a check to the club treasurer:

Daniel Finley, The 21 Club, Physics and Astronomy MSC07 4220 University of New Mexico Albuquerque, NM 87131-0001

Note: to guarantee your reservation(s) your online payment or your check (payable to "The 21 Club") must be **received** on or before **Thursday, November 8, 2018**. This enables us to provide the venue with an accurate head count.

For more information, contact Walter Gerstle.



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