

# NCCHPS

Northern California Chapter-Health Physics Society  
September 2011



## ***The NCCHPS September 2011 Dinner Meeting***

Thursday, September 15, 2011 - Francesco's Restaurant, Oakland

- 6 pm - Social Hour
- 7 pm - Dinner
- 8 pm – Presentation



**Speaker : Dr. Alfred Klett, Berthold Technologies**

### ***Neutron Detection***

Neutrons were once a small niche in radiation detection, but they have now become much more important in several fields of applications including nuclear and particle physics, neutron scattering for biological, chemical, medical and material analysis research, metrology, radiation protection, nuclear energy and the nuclear fuel cycle, reactor instrumentation, nuclear decommissioning and nuclear waste, homeland security, safeguards, fusion monitoring and industrial measurements.

As neutrons are electrical neutral they are very different from charged particles. This makes neutron physics very interesting. The neutron's characteristic properties and the basic physical principles for neutron detection and several important nuclear reactions and processes are briefly outlined.

The most important detection materials and detector types as well as some important concepts and techniques are described and discussed. This ranges from conventional instruments for radiation protection to the latest developments for the measurement of high energy neutrons and pulsed neutron fields in accelerator environments and covers also neutron calibration fields.

About the Speaker: Since 1992 Dr. Klett has been employed by Berthold Technologies, Bad Wildbad, Germany, manufacturer of radiation measuring instruments with 350 employees and worldwide business scope. During his tenure at Berthold, he has served as business element manager for radiation protection and manager of detector R&D. Previously Dr. Klett was a research scientist in antiproton physics at CERN / LEAR (PS202 JETSET Experiment), with design of the central straw detector for PS202, and experiments with polarized neutrons at CEN/SATURNE in Saclay, France. He has also researched neutrons at several hundred MeV at the Paul-Scherrer-Institute in Würenlingen, Switzerland

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## ***From The NCCHPS President...***

As the current President of the Chapter, it is my pleasure to help guide the Chapter through the coming year. I'm sure we will have some good speakers with interesting topics at the meetings and I'll work to keep you informed via these newsletters and Email correspondence. Thank you all for your continued support!

In keeping with past traditions, we are now emerging from our summer hiatus with a dinner meeting scheduled for September 15<sup>th</sup>. We've planned future meetings in November, January, March and the affiliates meeting May. We're working to coordinate at least one and perhaps two meetings this year on the Peninsula, likely joint meeting(s) with the AAPM and/or the ANS. Should other notable events such as Fukushima occur (hopefully, NOT!!) additional meetings and/or updates will be considered.

The board met in July, during which outgoing board members turned over responsibilities to their newly elected counterparts. It is truly refreshing to know that some of the board members are young new faces – all concerned and dedicated participants in the health physics community, willing to help move our Chapter into the future. As always, we need to work to expand our community and to encourage younger people and students to come into the profession. They need us, and we need them, if we are to maintain expertise and continuity in our field.

Our Chapter finances are in good shape, despite the dragging economy. It's true the Moyer fund investments have lost some value – as have nearly all market investments – but I'm confident that the economy will recover, and with it, the value of our investments for the Moyer fund. Meanwhile, we are in no danger of being unable to continue to support educational assistance through the Moyer fund. Many thanks to all of the individuals who have made contributions to the fund! If you are able and want to make a difference, please consider making a contribution to the fund. It is truly helpful to the award recipients.

For the financial wellbeing of the Chapter's operating resources, we can thank our affiliate sponsors, without whom we would find it very difficult indeed – if not impossible – to continue our meetings, outreach programs and educational support. If you are involved in procurement for your organization, please remember the support our affiliates provide to us as a Chapter when you plan your next purchase of instrumentation or services.

Also, we have an important announcement: The Chapter now has an official mailing address:

Northern California Chapter of the Health Physics Society (or NCCHPS)  
4435 N. First Street #141  
Livermore, CA 94550

Please use this address for any future written communications, dues payments and the like. Hopefully, this will eliminate any missed or delayed information transfer between members or outside agencies and the NCCHPS Board of Directors.

See you in September!

Sincerely,

***Jack Topper, President  
NCCHPS***

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## MOYER FELLOWSHIP UPDATE from Charles Schmidt

For more than 25 years, our chapter has provided financial support to the Burton Moyer fellowship that recognizes outstanding graduate students in Health Physics.

This year's award was given to James Uhlemeyer who is enrolled in the Health Physics program at Texas A & M University. Jimmy was kind enough to send us a brief biography to acquaint our members with his achievements and aspirations, which is shown elsewhere in this newsletter. Take a moment to read about this fine young man.

Our investments with the Moyer Fund assets have allowed us to contribute \$4000 annually to the Fellowship. As I write this note in mid-August the stock market has taken a frightening dip of about 15% in less than a month. Our investment account has declined 10% in that period and now totals about \$74,000. This puts our yearly support commitment at over 5% of our assets, which is not a safely sustainable level in my opinion. Guess what! I think our membership should make some cash donations to this memorial. In the six years from June, 2004 to June 2010, total donations were \$12,000. In the past year the total was \$450, and \$350 of that came from the Sierra-Nevada chapter!! I think we can do better.

Times are tough, but if you can help, checks payable to NCCHPS may be given/sent to our treasurer Marcia Torres with the notation for the Moyer fund.

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## MEET JIMMY UHLEMEYER THE MOYER FELLOWSHIP RECIPIENT FOR 2011

Jimmy Uhlemeyer is a 23-year-old Master's student in the Texas A&M Health Physics department. He received his undergraduate degree magna cum laude from Rensselaer Polytechnic Institute in Troy, New York, majoring in Nuclear / Mechanical Engineering and minoring in Economics and Management. His senior design work was focused on supercritical carbon dioxide as a working fluid for a nuclear power plant. Reactor work was interesting, but the issues of radiation biology and health physics were even more so. He has not yet been published, but looks forward to it. He is honored to receive the Moyer fellowship.

The Uhlemeyer family hails from New Jersey, although they did a stint for nine years in Pleasanton, California. Learning about Livermore Labs was his first taste of real science. Jimmy still keeps in touch with some of his elementary school friends from that time. His family has always been supportive. His friends have introduced him to everything from Bhangra dancing to Xiangqi (Chinese Chess), although he is terrible at most of these things. He learned wrestling in high school, becoming a four-year varsity member of the team, and became a black belt in Judo during his college years.

He moved to Texas A&M not only for the excellent Health Physics department, but also because it is very warm. After spending four years at RPI (a wonderful school, but so cold that tree limbs have been known to fall off and shatter due to ice build-up), this has been a welcome change. Texas is a nice place with no Garden State Parkway road rage. As a New Jerseyite, it is bewildering that people are suddenly stopping at stop signs and waving hello with the whole hand.

Pets have been a taboo in the past due to one of his aunts having a bad allergy, but his roommates in Texas are veterinary students. *Their* pets include a dog, two cats, two bearded lizards, two turtles and a tortoise, several varieties of lizard, at least three snakes of various species (including an eight-foot constrictor), and two rats. Jimmy no longer screams like a girl when one of the snakes gets out.

His current academic activities include research into pigmentation, chimeras, and space radiation under Dr. John Ford. Outside of this, he is acting in local community theatre, writing bad short stories, and rebuilding an old Mr. Do! arcade machine. Currently, he is satisfied at having written a short bio about himself entirely in the third person.



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## ***Upcoming NCCHPS Meetings...***

17 November 2011

19 January 2012

15 March 2012

17 May 2012

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**NCCHPS**  
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Livermore, CA 94550

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**Direct input for our next newsletter to:**

**Warren TenBrook**  
**warren@tenbrook.org**  
**925-423-1470**

## **The Next NCCHPS Meeting!**

September 15, 2011

Francesco's

8520 Pardee Drive at Hegenberger Road  
Oakland CA 94621

Telephone: (510) 569-0653

<http://www.francescosrestaurant.com/>

Free parking available at Francesco's

Cost:

NCCHPS members \$30 (\$35

@ door)

NCCHPS member's Spouses \$35

Students \$10

Non-members \$40

Deadline:

Please register by September 12, 2011!

*Note that cancellations may not be made after the RSVP deadline.*

Menu:

1. Breast of Chicken Parmegiana
2. Fresh Fillet of Salmon
3. Vegetable Manicotti

<http://hpschapters.org/ncchps/dinner.php3>

**Only online registrations will be accepted.**  
**Contact Ibrahim Ozcan ONLY if you**  
**encounter problems with online registration:**  
**[IOzcan@lbl.gov](mailto:IOzcan@lbl.gov)**

## **2011-2012**

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### **Board**

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