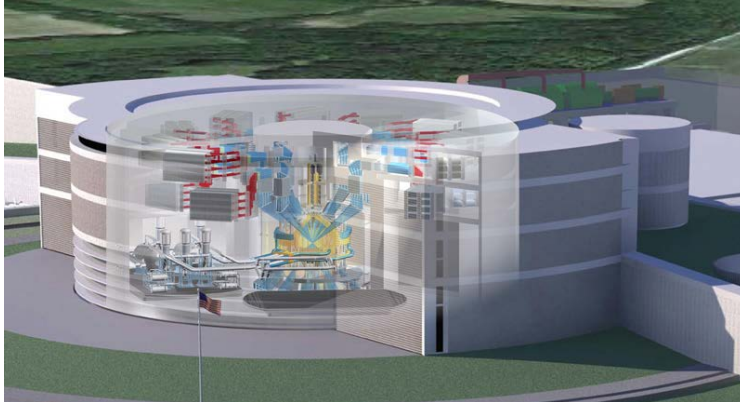


# NCCHPS

Northern California Chapter-Health Physics Society  
September 2012



## *The NCCHPS September 2012 Dinner Meeting*



**Thursday, September 20, 2012**

**Speisekammer Alameda**

**6 pm Social**

**7 pm Dinner**

**8 pm Presentation:**

**LASER INERTIAL FUSION ENERGY  
(LIFE)  
OVERVIEW AND DELIVERY\***


***Dr. Susana Reyes, LIFE Licensing and Tritium Systems Lead, LLNL***

**Summary:** The National Ignition Facility (NIF), the world's largest and most energetic laser, is now fully operational at Lawrence Livermore National Laboratory. In this talk we will discuss an approach to generating gigawatts of electrical power using laser-driven targets that are based upon NIF demonstrations. A system-wide optimization provides a solution that produces competitive commercial power while only requiring moderate fusion gains. This "LIFE" concept addresses many of the long-standing challenges to timely delivery of commercial fusion power.


About the Speaker: Dr. Susana Reyes is a nuclear engineer at LLNL, with more than 13 years of experience in international fusion projects. She is currently leading the LIFE effort for licensing and tritium systems. She earned an M.Sci. in Power Engineering from the Polytechnic University of Madrid in 1998 and a Ph.D. in Nuclear Engineering from the UNED University in Madrid in 2001. Dr. Reyes then joined LLNL's Fusion Energy Program to work on the safety analysis of inertial fusion energy power plant designs. Since then, she has worked in a variety of fusion research projects, such as the U.S. ITER Test Blanket Module program, for the testing of tritium breeding blanket concepts within the ITER facility. She has also been strongly involved in neutronics and materials damage simulations at LLNL in support of high-energy accelerators and of the National Ignition Facility (NIF). From 2006 until early 2010, Dr. Reyes took a leave of absence from LLNL in order to join the ITER Organization in Cadarache, France, to support the project through the performance and coordination of safety analyses and associated documentation in preparation for ITER licensing.

Dr. Reyes is the current vice-chair/chair-elect of the American Nuclear Society (ANS) Fusion Energy Division, and is also a member of the ANS Northern California chapter Executive Committee.

\*This work performed under the auspices of the U.S. Department of Energy by Lawrence Livermore National Laboratory under Contract DE-AC52-07NA27344.

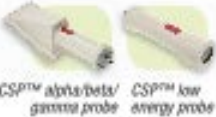


## New Health Physics Solutions from CANBERRA




**Colibri®**

> Colibri™ TTC is for Data logging, Mapping and Networking Applications. Deploy Colibri along with wireless CANBERRA Smart Probes (CSP™) for remote measurements with improved ALARA.




CSP™ alpha/beta/  
gamma probe    CSP™ low  
energy probe




**UltraRadic™-Plus**

> Personal radiation monitor designed for the needs of first responders. Measures and displays radiation dose rate and total dose. Operable/readable by personnel in fire fighting or HAZMAT protective gear.




**MiniSentry**

> The MiniSentry is a gamma sensitive portal monitor designed to be quickly set up and operated with very little training or expertise in radiation detection technology. This portable system is used to quickly provide a gamma scan of pedestrians or vehicles for emergency scenarios.




**Osprey™**

> Universal Digital MCA Tube Base for Scintillation Spectrometry. The Osprey™ is a high-performance, fully-integrated multi-channel analyzer (MCA) tube base that contains everything needed to support scintillation spectrometry. Designed for both laboratory and field use.




**Falcon 5000®**

> A portable high resolution isotope identification system equipped with an electrically cooled HPGe detector and built-in GPS with automatic coordinate logging.



**Sirius™-5 Hand, Cuff & Foot Monitor**

> Sirius-5 monitors are easily networked with for remote supervision of system activity. Our optimized geometry and sophisticated background trending software ensure fast throughput with exceptional contamination control.



[www.canberra.com](http://www.canberra.com)

Canberra Industries, Inc.    800 Research Parkway    Meriden, CT 06450 U.S.A.    Tel: (203) 238-2351    Toll free: 1-800-243-4422    Fax: (203) 235-1347

CANBERRA IS PART OF AREVA - WORLDWIDE LEADER IN CO<sub>2</sub>-FREE ENERGY.

## 2013 Midyear Topical Meeting - Medical Health Physics and Accelerator Dosimetry

27–30 January 2013, Scottsdale, Arizona

The Health Physics Society invites members of the Society, members of AAPM, other scientists and students to participate in the 46th Midyear Topical Meeting of the Health Physics Society. The HPS has applied for CAMPEP credits for attendance at this meeting.

### **Abstract Due Date: September 7, 2012**

Please submit your abstract on-line using the site: <http://www.hpschapters.org/2013midyear/abstracts/>  
**NOTE:** Abstracts submitted via email will not be accepted.



<p><b><i>Upcoming NCCHPS Meetings...</i></b></p> <p><b>September 20, 2012</b></p> <p><b>November 15, 2012</b></p> <p><b>January 17, 2013</b></p> <p><b>March 21, 2013</b></p> <p><b>May 16, 2013 Affiliate Night</b></p> <p><b>Mailing Address:</b> NCCHPS 4435 First Street #141 Livermore, CA 94550</p> <p><b>Email:</b> ncchps@gmail.com</p> <p><b>Website:</b> <a href="http://hpschapters.org/ncchps/">http://hpschapters.org/ncchps/</a></p> <p><b>Newsletter Editor:</b> Warren TenBrook warren@tenbrook.org 925-423-1470</p> <p><b>Affiliate Liason:</b> Nelson Chiu ncchpsaffiliatecontact@gmail.com (414) 559-5586</p>	<p><b><u>The Next NCCHPS Meeting!</u></b></p> <p>September 20, 2012 <b>Speisekammer</b> 2424 Lincoln Ave. Alameda, CA 94501 (510) 522-1300</p> <p>Appetizers Buffet with Pitchers of Beer, Red &amp; White Wine on Table, cash for cocktails</p> <p>Dinner Buffet: Carrot, Red Beet, Cucumber and Cabbage Salads; Sauerbraten Marinated and braised Beef Jägerschnitzel vom Schwein; Pork Cutlet, sautéed in Mushroom Sauce; Grilled Salmon with Cucumber Dill Sour Cream served on a bed of Spinach</p> <p>Vegetarian: Spätzle baked with Asiago and Parmesan Cheese, Caramelized Onions (can also be a side dish)</p> <p>Sides: Grilled Broccolini, Red Cabbage Mashed Potatoes</p> <p>Dessert: Chocolate Bread Pudding with Vanilla Sauce</p> <p>Cost:</p> <table> <tr> <td>NCCHPS members</td> <td>\$30 (\$35 @ door)</td> </tr> <tr> <td>NCCHPS guests</td> <td>\$35</td> </tr> <tr> <td>Students</td> <td>\$10</td> </tr> <tr> <td>Non-members</td> <td>\$40</td> </tr> </table> <p><b><u>Deadline:</u> Please register by Sept 13.</b> <b><i>Cancellations not accepted after the RSVP deadline; attendance will be limited to 50 people due to room size:</i></b></p> <p><a href="http://hpschapters.org/ncchps/dinner.php3">http://hpschapters.org/ncchps/dinner.php3</a></p> <p>Only online registrations will be accepted. Contact <a href="mailto:thompson130@llnl.gov">thompson130@llnl.gov</a> ONLY if you encounter problems with online registration.</p>	NCCHPS members	\$30 (\$35 @ door)	NCCHPS guests	\$35	Students	\$10	Non-members	\$40	<p><b><u>2011-2012 NCCHPS Board Members:</u></b></p> <p><b>President</b> Fran Dickens <a href="mailto:dickens3@llnl.gov">dickens3@llnl.gov</a> 925-422-3813</p> <p><b>President-Elect</b> Jon Dillon <a href="mailto:dillon10@llnl.gov">dillon10@llnl.gov</a> (925) 423-6167</p> <p><b>Past President</b> Jack Topper (925) 423-8082 <a href="mailto:topper1@llnl.gov">topper1@llnl.gov</a></p> <p><b>Secretary</b> Naomi Reeves <a href="mailto:NEReves@lbl.gov">NEReves@lbl.gov</a> (510)495-2202</p> <p><b>Member-at-Large</b> Phillip D. Worley <a href="mailto:worley6@llnl.gov">worley6@llnl.gov</a> 925-422-7574</p> <p><b>Member-at-Large</b> Kaylie Thompson <a href="mailto:thompson130@llnl.gov">thompson130@llnl.gov</a> (925) 422-6846</p> <p><b>Treasurer</b> Melissa Mannion <a href="mailto:MCMannion@lbl.gov">MCMannion@lbl.gov</a> (510) 486-4423</p>
NCCHPS members	\$30 (\$35 @ door)									
NCCHPS guests	\$35									
Students	\$10									
Non-members	\$40									