Newsletter American Nuclear Society Trinity Section

ANS Trinity Section, 3167 San Mateo Blvd NE #131, Albuquerque, NM 87110

Spring 2021

http://local.ans.org/trinity/



Zoom Lightning Talks #4

In the continued absence of inperson meetings, the Section hosted session #4 of our Lightning Talks series as a "virtual" meeting over Zoom on Tuesday 23 Feb 2021, in which two of our members volunteered to tell us something about technical activities of interest. These talks were about 20 minutes in length, with time for individual Q&A and then open discussion at the end:

- Richard (Dick) Malenfant, Los Alamos National Laboratory (retired); Experiments with the Dragon Machine.
- Dr. Mary Alice Cusentino, Compu-(LIGHTNING #4, continued on page 2)

UNM Student Section Update

ANS UNM has had a really great year despite all of the adversity that has accompanied the last 14 months, and we look forward to having a great year next year! Over the last 5



(UNM, continued on page 2)

Election Results

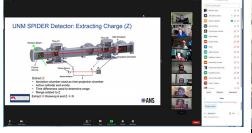
The Section's Spring elections have just concluded. Results (effective 16 Jun 2021):

Vice Chair/Chair-elect: Nicholas W. Thompson (LANL)

Secretary: Joshua G. Richard (LANL)

Treasurer: David L. Luxat (SNL)

(ELECTIONS, continued on page 2)



Zoom Lightning Talks #5

A fifth set of Lightning Talks was offered on Tuesday 23 Mar 2021. This was a special session dedicated to work in progress by three graduate students in the UNM Nuclear Engineering Department. There was time for individual Q&A after each presentation and then open discussion at the end:

- Phoenix Baldez. UNM Nuclear Engineering PhD candidate; The UNM Fission Spectrometer for individual fission fragment identification and correlated gamma-rays.
- Matthew Lazaric, UNM Nuclear Engineering PhD candidate: A Review of Windowed Multipole: A (LIGHTNING #5, continued on page 2)



Science Communication Zoom

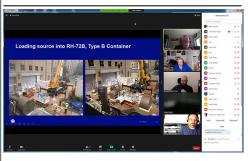
Talking the Talk: Effective Science and Risk Communication was a hybrid event held on Friday 21 May 2021 (both in-person at UNM and over Zoom) with 20 participants. This live panel discussion on the challenges of nuclear risk communication featured distinguished nuclear communicators Katie Mummah (UW-Madison) and Bobbi Riedel (UNM), as well as PI&O Chair Carl Willis (UNM). Dr. Matthew Jasica (now of Argonne National Laboratory) moderated the lively discussion.



"Discover STEaM" from PI&O

Inspiring new audiences with the possibilities of nuclear and radiation technology has been challenging during the pandemic, but thanks to a grant from the national ANS, Trinity Section debuted an audience-participatory live video demonstration of x-ray imaging. X rays are generated with a handcranked Wimshurst static generator (from Amazon) and a 2X2 vacuum tube, and a live fluoroscopic image of the detected radiation is streamed from

(STEaM, continued on page 2)



Zoom Lightning Talks #6

A sixth set of Lightning Talks was offered on Tuesday 11 May 2021 over Zoom, in which three of our members volunteered to tell us something about technical activities of interest. There was time for individual Q&A after each presentation and then open discussion at the end:

(LIGHTNING #6, continued on page 2)

(LIGHTNING #4, continued from page 1)

tational Materials and Data Science, Sandia National Laboratories; *Multiscale Modeling of Materials for Fusion Energy.*

15 individuals participated in Lightning Talks #4, and some good discussion was stimulated, both after individual talks and during the wrap-up. A flyer with their abstracts, and the slides they used, are posted on our Past Events page.

(LIGHTNING #6, continued from page 1)

- Jameson Hetrick, Holtec International; Selected Projects with MCNP and Reactor Design.
- Jonathan D. Creel, Public Engagement Specialist, Manhattan Project National Historical Park, Community Partnerships Office, LANL; Engaging with Our History: Manhattan Project National Historical Park Updates.
- John L. Bliss, MS, CHP, Principal Health Physicist, ESHQSS-INT (Integration Program Office), LANL; Achieving Termination of Radiological Controls Following a Cs-137 Release at the Harborview Research and Training Building.

22 individuals participated in Lightning Talks #6. A good discussion was stimulated, both after individual talks and during the wrap-up. A flyer with their abstracts, and the slides they used are posted on our Past Events page.

If you are interested in presenting a lightning talk of your own current work, please contact any ExCom member (at the right) or drop us a line at ans.trinity@yahoo.com.

2021 ANS Gold and Silver Membership Certificates

Gold (50-years)

Dr. R. Arthur Forster (LANL)

Mr. David J. Dixon

Dr. Fred L. Ribe

Dr. LaRon L. Smith

Silver (25 years)

Mr. Eric M. Furman (SNL)

Dr. Karen Corzine Kelley (LANL)

Mr. James J. Kuropatwinski (LANL)

Dr. Peter J. Jaegers (LANL)

Dr. David J. Mercer (LANL)

Mr. Eric J. Pitcher (LANL)

(ELECTIONS, continued from page 1)

At-Large members:

Miriam A. Kreher (MIT, LANL) Adam A. Hecht (UNM).

UNM Student Section President: TBD

The Section would like to express our sincere thanks for their dedicated service to the following individuals upon the completion of their terms:

Previous Chair: Travis J. Trahan
(LANL)

<u>Treasurer</u>: Pat McDaniel (UNM, SNL)

<u>At-large member</u>: Matthew J. Jasica
(SNL, now Argonne Nat'l Lab)

UNM Student Section President:

(STEaM, Continued from page 1)

Christian Arguello

an image intensifier nearby. Audience members can interact with the presenter to suggest objects to "see inside," such as mobile phones, household tools, and apples with razor blades in them (recalling the beloved '80s Halloween moral panic). The demo was premiered in December for local Girl Scouts as part of the ANS "Get to Know Nuclear" patch activities, and was featured at the National Museum of Nuclear Science & History's "Discover STEaM" event in February 2021. Watch a recorded video at: https://www.youtube.com/ watch?v=EX7CedSI5sg

As we emerge from lockdown, new possibilities for engaging with public audiences and amongst ourselves are being explored. I'm excited to announce an upcoming event that your Trinity Section PI&O Committee is planning:

The PI&O Committee is developing a 1,000-word science writing contest with the goal of challenging our community to try our hand at something most of us don't do often: compose a short scientific article for a general audience! Our vision includes cash prizes, a special contest for students, and an expert panel workshop featuring professional science journalists, with entries due and judging to be held in the coming winter. Please send me suggestions—for prizes, for judges, for ways to promote the event—at carlwillis@UNM.edu.

(UNM, continued from page 1)

months, the UNM American Nuclear Society Student Section has continued to host events to keep the students engaged. These have included technical workshops, local and national internship seminars, and even sending students to the 2021 ANS National Student Conference. Despite the difficulty of keeping engagement up, the student section kept pushing through until the end! Over the course of the summer, the Student Section is looking to maintain engagement by hosting coding workshops and social events in order to keep the community excited for classes that are expected to be open in person in the fall.

(LIGHTNING #5, continued from page 1)

Novel Nuclear Data Formalism.

Rowdy Davis, UNM Nuclear Engineering PhD candidate; Revisiting the Lockwood Albedo Measurements for Validation of the Integrated TIGER Series Electron-Photon Transport Code.

18 individuals participated in Lightning Talks #5, and considerable discussion was stimulated. A flyer with their abstracts, and the slides they used, are posted on our Past Events page.

2021-2022 Officers and Committee Chairs

Executive Committee:

Chris Perfetti, Chair (²22), UNM
Josh Richard, Secretary (²24), LANL
David Luxat, Treasurer (²24), SNL
John Bliss, Immediate Past Chair (²22), LANL
Matthew Denman, Previous Chair (²22), Kairos
Power

Christian Arguello, UNM Student Section President ('21)

Jameson Hetrick, At-large ('22), Holtec Int'l James Tutt, At-large ('22), LANL Mary Alice Cusentino, At-large ('23), SNL Melissa Teague, At-large ('23), SNL Adam Hecht, At-large ('24), UNM Miriam Kreher, At-large ('24), MIT/LANL

Committee Chairs:

Carl Willis, Public Information & Outreach, UNM Bill Flor, Communications, LANL [vacant], Membership, northern Co-chair [vacant], Membership, southern Co-chair Tom Hirons, Emeritus, LANL (Retired)

To reach the ExComm members, visit our Directory at http://local.ans.org/trinity/directory.html .