

Selected Presentations

Rachel N. Slaybaugh

August 17, 2021

“Optimal Operations of Advanced Reactors: How Do We Get There?” Current Issues in Computational Methods – Roundtable, American Nuclear Society Annual Meeting. Online. 14 June 2021. (invited)

Panelist for “Serving the Nation: Engineering as Leaders in Government.” Spring Dean’s Society Event. Online 24 Mar. 2021. (invited)

“How Can Nuclear Support a Clean Energy Future?” American Physical Society Meeting. Online. 17 Mar. 2021. (invited)

“Nuclear in the 2020s: considerations for the decade ahead.” **Keynote Speaker**, ARPA-E Annual Fission Meeting. Online. 23 Feb. 2021. (invited)

Guest Lecture “Nuclear Energy (where we are, where we are going, and why)” for STIA 402: Clean Energy Innovation, Georgetown University School of Foreign Service. Online. 20 Oct. 2020. (invited)

Panelist for “Flexible Nuclear for Future Energy Systems Webinar.” Lucid Catalyst and ClearPath. 5 Aug. 2020. (invited)

Panelist for “Beyond Now: Microreactors and Near Term Demonstrations - Perspectives from the Department of Defense and Department of Energy.” Panelist. U. S. WIN Virtual Conference. 28 July 2020. (invited)

Panelist for “Advanced Nuclear Tech in a Decarbonized Energy Future: Feasible or Fantastical?” Duke Energy Initiative lecture series. Online. 14 July 2020. (invited)

Panelist for “Challenges and Opportunities in Thermal Hydraulics of High Temperature Gas Cooled Reactors.” American Nuclear Society Annual Meeting. Online. 8 June 2020. (invited)

Panelist for “Building Your Leadership Competency.” American Nuclear Society Annual Meeting. Online. 8 June 2020. (invited)

“How Can Nuclear Be Part of a Clean Energy Future?” G20 Workshop on Circular Carbon Economy. Riyadh, KSA. 5 March 2020. (invited)

“Special Update: ARPA-E Nuclear Program Update.” Advanced Reactors Summit VII. Knoxville, TN. 11 Feb 2020. (invited)

“The Opportunity of Next-Gen Nuclear Energy.” Citizen’s Climate Lobby, Fairfax Meeting. Annandale, VA. 11 Feb 2020. (invited)

“How Can Nuclear Energy Be Part of a Clean Energy Future?” Climate Tech Convening 2020. San Francisco, CA. 30 Jan 2020. (invited)

Panelist for “Time to be Inclusive and Pragmatic Before Its Too Late: Advanced nuclear technologies must be a significant part of the solution set.” Cleantech Forum. San Francisco, CA. 28 Jan 2020. (invited)

“What is ARPA-E Doing in Nuclear Energy?” Argonne National Laboratory Colloquium. Lemont, IL. 20 November 2019. (invited)

Guest Lecture “Nuclear Energy” for STIA 402: Clean Energy Innovation, Georgetown University School of Foreign Service. 23 Oct. 2019. (invited)

Panelist for “The role of innovation in the civilian and military nuclear energy sectors.” The civilian-military nexus and the role of innovation in nuclear energy, Atlantic Council. Washington, DC. 15 Oct 2019. (invited)

“Nuclear and ARPA-E: Activities and Opportunities.” NUC Workshop: Innovations in Advanced Reactor Design, Analysis, and Licensing. Raleigh, NC (given remotely). 18 September 2019. (invited)

“Nuclear Energy Programs and Research at Advanced Research Projects Agency-Energy (ARPA-E).” GABI nuclear energy roundtable. Washington, DC. 12 September 2019. (invited)

Panelist for “Future Scientists and Engineers for Nuclear Energy.” Third Symposium on US-Japan Nuclear Energy Research Cooperation. Washington, DC. 26 June 2019. (invited)

Panelist for “Lessons from Solar PV.” Breakthrough Dialogue 2019 Whole Earth Discipline. Sausalito, CA. 21 June 2019. (invited)

“Computing in Nuclear Engineering: Moving Beyond Today’s Limitations.” MIT Nuclear Science & Engineering Colloquium. Cambridge, MA. 29 April 2019.

“Creating the Future of Nuclear Energy.” CITRIS Research Exchange Seminar Series. Berkeley, CA. 28 Nov. 2018. (invited)

“U.S. Nuclear Innovation System.” Commercialisation of Small Nuclear in the UK. Coventry, UK. 6 Nov. 2018. (invited)

“MEITNER: The Newest ARPA-E Program.” NASA iTech. New York, NY. 14 June 2018. (invited)

“Deep decarbonization: financing the rapid deployment of innovations after R&D.” 2050 Today Panel. San Francisco, CA. 15 June 2018. (invited)

“Advanced Solvers for Radiation Transport.” University of Illinois Urbana Champaign NPPE Dept. Graduate Colloquium. Champaign, IL. 5 Dec. 2017. (invited)

“Nuclear Energy: What Can Analytics Do for Economics and Safety?” **Keynote Speaker**, Industrial Machine Learning Workshop 17. San Francisco, CA. 24 Oct. 2017. (invited)

Panelist for “Alternative energy, nuclear and CCS: What are the prospects?” Low-Emissions Solution Conference at the 5th International Conference on Sustainable Development. New York, NY. 21 Sept. 2017. (invited)

Panelist for “The Case for Nuclear: Communications and Analyzing Risks and Benefits” Aspen Institute Future of Nuclear Energy Roundtable. Aspen, CO. 12 Sept. 2017. (invited)

“Advanced Solvers and Innovation for Penetrating Radiation” **Keynote Speaker**, SPIE Penetrating Radiation Technical Event. San Diego, CA. 8 Aug. 2017. (invited)

“Challenges & Opportunities in Developing an Innovation Culture in Nuclear.” Second Annual Third Way Advanced Nuclear Summit Panel. Washington, DC. 21 Feb. 2017. (invited)

“Advancing Reactors with Advanced Solvers and Innovative Programs.” Electric Power Research Institute. Research Meeting. Palo Alto, CA. 13 Feb. 2017. (invited)

“Exploring the Advanced Nuclear Ecosystem.” SxSW Eco Panel. Austin, TX. 12 Oct. 2016. (invited)

“The Opportunity of Global Nuclear Innovation.” 49th Japan Atomic Industrial Forum (JAIF) Annual Conference. Tokyo, Japan. 12 April 2016. (invited)

“Exascalping Nuclear Innovation.” **Keynote speaker**, Conference on Data Analysis 2016. Santa Fe, NM. 4 Mar. 2016. (invited)

“Let’s Get Real: When can we expect commercial advanced reactors?.” The Advanced Nuclear Summit and Showcase Panel. Washington, DC. 27 Jan. 2016. (invited)

- “Hybrid Transport Methods for Shielding Challenges.” Idaho National Laboratory seminar. Idaho Falls, ID. 20 Nov. 2015. (invited)
- K.L. Rowland, R.N. Slaybaugh. “Developments in the GPU-accelerated WARP Monte Carlo Neutron Transport Code.” Workshop sur l’utilisation des accélérateurs (GPUs, MICs) pour les simulations Monte-Carlo. École Polytechnique, Saclay, France. 10 July 2015.
- “The PyNE Software Library: A Framework for ENSDF?” Nuclear Data Week Meeting. Brookhaven National Laboratory. 6 Nov. 2014.
- “The Resonance Factor Method: Accelerating Monte Carlo in the Presence of Space and Energy Self-Shielding.” CEA-Saclay Colloquium. Saclay, France. 26 June 2014.
- R.N. Slaybaugh, T.M. Evans, P.P.H. Wilson, S.C. Wilson. “Radiation Transport: Computational Methods and Real-World Use.” NC State Univ. NE Dept. Graduate Colloquium. Raleigh, NC. 8 Nov. 2012. (invited)
- R. Slaybaugh, M. Arbidze, S. Lamichhane, D. O’Connor. “An Evaluation of European Union Energy Policies.” UW–Madison Center for World Affairs and the Global Economy Seminar. Madison, WI. 11 May 2011.
- R.N. Slaybaugh, T.M. Evans, G.G. Davidson. “Parallel Algorithms for Fixed-Source and Eigenvalue Problems.” 2010 SIAM Annual Meeting. Pittsburgh, PA. 12-16 July 2010.