

## PONI 2018 Conference Series Application and Research Agenda

PONI is accepting presentation proposals for our 2018 Conference Series. The PONI conference series brings together a diverse community of professionals from across the nuclear enterprise to discuss a wide range of nuclear issues. PONI conferences are unique in the high value they place on highlighting new faces and emerging experts in the field, as panels feature the best and brightest young professionals.

### Application Materials:

1. **Resume or CV** listing complete educational and professional information and relevant extracurricular and research activities.
2. **Research Proposal Form** outlining your proposed research and methodology, and description of why you are interested in participating in the program.
3. **Letter of Recommendation** from your current employer or professor that references your writing and presentation ability, engagement, and interest in nuclear issues.

Online application materials available at: <https://nuclearnetwork.csis.org/apply/conference-series/>.

**Presentation proposals are accepted on a rolling basis for the Winter Conference (CSIS, December 4-5, 2018). Please email applications to Simone Williams at [SWilliams@csis.org](mailto:SWilliams@csis.org) to be considered.**

### Possible Research Topics

#### **Emerging Technologies and Nuclear Risk**

Rapidly developing technologies are transforming how both the United States and its adversaries understand and compete within the strategic operating environment. The pace of technological advancement is outstripping our ability to understand how new capabilities may undermine strategic stability or conversely, how it may improve crisis management. What technological advances might reshape the nuclear deterrence landscape or increase the possibility of nuclear crisis? How would new technologies change timelines in a crisis?

#### **Crisis Management and Escalation**

Traditional formations of escalation dynamics appear inadequate for analyzing the multitude of potential nuclear escalation scenarios. The concept of the escalation ladder is insufficient when a nuclear crisis involves growing complexity and intensity between multiple actors largely focused on managing regional influence and conflict. What are different conceptualizations for understanding escalation dynamics particularly in regional crisis scenarios? How does thinking on escalation differ between nuclear armed states?

#### **Deterring Regional Nuclear Risks**

Growing nuclear arsenals and expanding delivery capabilities are dramatically raising the stakes for nuclear crisis management. While North Korea grabs many of the headlines, several other countries present rising nuclear deterrence challenges. Presentations can examine alternative pathways and timelines to regional instability, analyze implications for nuclear security or identify technical, operational and policy options for risk reduction and management.

### **Future of Arms Control**

With serious challenges to the INF Treaty and New START negotiations looming, the prospects for arms control agreements between the United States and Russia appear bleak. What are the prospects for future bilateral and multilateral arms control agreements and what role should the United States and other nuclear weapon states play in reaching those accords? Presentations can include verification and technical approaches to nonproliferation and disarmament or alternative approaches to arms control in the current security environment.

### **The Ethics, Legality and Morality of Nuclear Weapons**

In recent years the Humanitarian Initiative Movement and Nuclear Weapons Ban Treaty have raised important questions about the morality and legality of nuclear weapons in the international system. At the same time, the uncertain security environment and subsequent modernization programs have challenged progress towards arms control and disarmament. What international and domestic laws constrain nuclear weapons? If the Nuclear Weapons Ban Treaty comes into force, what are next steps for the nonproliferation regime? How does the nonproliferation regime address the growing divide between NWS and NNWS? What are next steps for pursuing to prepare for the 2020 NPT RevCon? How should the nuclear community engage a wider audience on deterrence, arms control and disarmament?

### **The Evolving Nuclear Security Environment**

As the 50<sup>th</sup> anniversary of the Nonproliferation Treaty (NPT) approaches, how can the United States and international community prevent nuclear proliferation, ensure the security of nuclear material, and maintain the integrity of the global nonproliferation regime? Presentations can explore issues such as maintaining and strengthening nonproliferation regimes and norms, combating trafficking of illicit nuclear materials, countering radiological, biological, chemical and nuclear terrorism, the policy implications of new developments in the field of nuclear forensics and detection, etc.