**ANS** Trinity Section

## DINNER MEETING

DETERRENCE AND ASSURANCE IN OUR CHANGING WORLD

MARVIN ADAMS
TEXAS A&M UNIVERSITY



## **ABOUT THE EVENT:**

NATIONAL MUSEUM OF NUCLEAR SCIENCE & HISTORY

601 Eubank Blvd. SE, Albuquerque, NM 87123

Join the Trinity Section of the American Nuclear Society for a Dinner Meeting with Marvin Adams from Texas A&M University.

- 6:00 Social Hour with Cash Bar
- 7:00 Buffet Dinner
- 7:45 Speaker

### **CONTACT**:

ans.trinity@yahoo.com trinity.ans.org

### RSVP:

**Advanced Registration:** \$45

Tickets at Door: \$50 Students & Children: \$20 APRIL 25, 2025

**ANS** Trinity Section

## DINNER MEETING

# DETERRENCE AND ASSURANCE IN OUR CHANGING WORLD

#### **ABSTRACT**

An overarching U.S. national-security objective is to preserve U.S. independence, and the independence of U.S. allies and partners, without having to fight major wars. Deterrence is the key strategy by which the nation strives to achieve this objective. Some deterrence tools are designed to deny or reduce the benefit an adversary might gain from an action (e.g., improving defense against cyber attacks), while others are designed to impose costs in response to an adversarial action (e.g., having the capability to destroy targets valued by the adversary). To remain effective, deterrence tools must adapt as adversarial systems and policies evolve. In the past several years, there has been significant evolution—in directions unfavorable to U.S. interests—in all of the following: capabilities of potential adversaries' systems; likely pace of further capability advances; and the doctrines, policies and alliances that affect how adversarial actions might unfold. As a result, today's global security environment is the most challenging the United States has faced in many decades. Dr. Adams will describe deterrence challenges that arise from this evolving environment and some steps that might be taken to meet them. Discussion will be encouraged.

#### **BIOGRAPHY**

Dr. Adams began his nuclear career in 1977 as an engineering aide at the Sequoyah Nuclear Plant near Chattanooga, TN. He has spent most of his career since 1986 engaged in a variety of roles related to national and international security. His most recent major role was as the Deputy Administrator for Defense Programs at the National Nuclear Security Administration (NNSA), where he was responsible for the design, manufacture, certification, transportation, maintenance, assessment, and dismantlement of U.S. nuclear weapons and also worked with the interagency on policy and force structure related to the U.S. nuclear deterrent. Prior to his Senate confirmation as Deputy Administrator, Dr. Adams served on the President's Council of Advisors on Science and Technology; the Stockpile Assessment Team of the Strategic Advisory Group for U.S. Strategic Command; the JASON defense advisory group; the National Academies' Committee on International Security and Arms Control; the Predictive Science Panel for the Lawrence Livermore and Los Alamos National Laboratories (LLNL and LANL); the Mission Committee for LANL; the Predictive Engineering Sciences Panel at Sandia National Laboratories, and many other review and advisory bodies related to national security. Dr. Adams spent more than five years as a physicist in the weapons program at LLNL and 30 years as Professor of Nuclear Engineering at Texas A&M University before serving as NNSA Deputy Administrator, and he has returned to the Texas A&M University System as a Senior Advisor in the Nuclear Security Office. Dr. Adams earned his Ph.D. and M.S. degrees in nuclear engineering from the University of Michigan and his B.S. degree in nuclear engineering from Mississippi State University.

Online Registration: trinity.ans.org/calendar