

APR17-2016-020069

Abstract for an Invited Paper  
for the APR17 Meeting of  
the American Physical Society

### **The Nuclear Nonproliferation Treaty in Context**

KELSEY DAVENPORT, Arms Control Association

The 1968 Nuclear Nonproliferation Treaty (NPT) is the cornerstone of multilateral efforts to prevent the spread of nuclear weapons and promote efforts toward complete disarmament. In the grand bargain of the NPT, states foreswore pursuit of nuclear weapons in exchange for access to nuclear technology and limited nuclear arsenals to the five states (China, France, Russia, the United Kingdom and the United States) that tested such weapons before the NPT's conception. Now in its seventh decade, the NPT regime is embraced by the vast majority of the world's nations and is viewed as a critical element of international security. However, despite past successes in halting efforts in several states to pursue nuclear weapons, near universal adherence, and only one withdrawal (North Korea), the NPT regime is at a critical crossroads. The treaty has proven unable to adapt to new challenges, such as emerging technologies that threaten operational strategic realities, the devolution of state authority to non-state actors and institutions, and growing dissatisfaction with slow pace of nuclear disarmament. Additionally, the treaty leaves open critical questions, including whether or not state parties have the 'right' to pursue technologies that allow for domestic production of fuels for nuclear reactors and if modernization programs for nuclear warheads are inconsistent with the treaty. If these questions remain unresolved, the international community will find itself ill prepared to confront emerging proliferation challenges and the NPT, the linchpin of international nonproliferation and disarmament efforts, may begin to erode.