

Evening Talk PV XV Thu 20:00 H-Aula/HS I/HS X
Max von Laue Lecture: What physicists can do to improve international security? — ●STEVE FETTER — University of Maryland, College Park, USA

After developing nuclear weapons, physicists were at the forefront in alerting policymakers and the public to the dangers of nuclear war. National academies, non-governmental organizations, and individual scientists helped conceive and promote arms control concepts and de-

velop verification technologies which formed the foundation for treaties that enhanced international security and stability. That foundation is now crumbling, as treaties are discarded and a new generation of nuclear weapon systems is under development. Moreover, new security challenges are arising from emerging technologies, including quantum sensors and computing; artificial intelligence, machine learning, and robotics; cybersecurity; small satellites; and gene synthesis and editing. The physics community can play an important role in educating policymakers and the public about these risks and how they can be reduced.