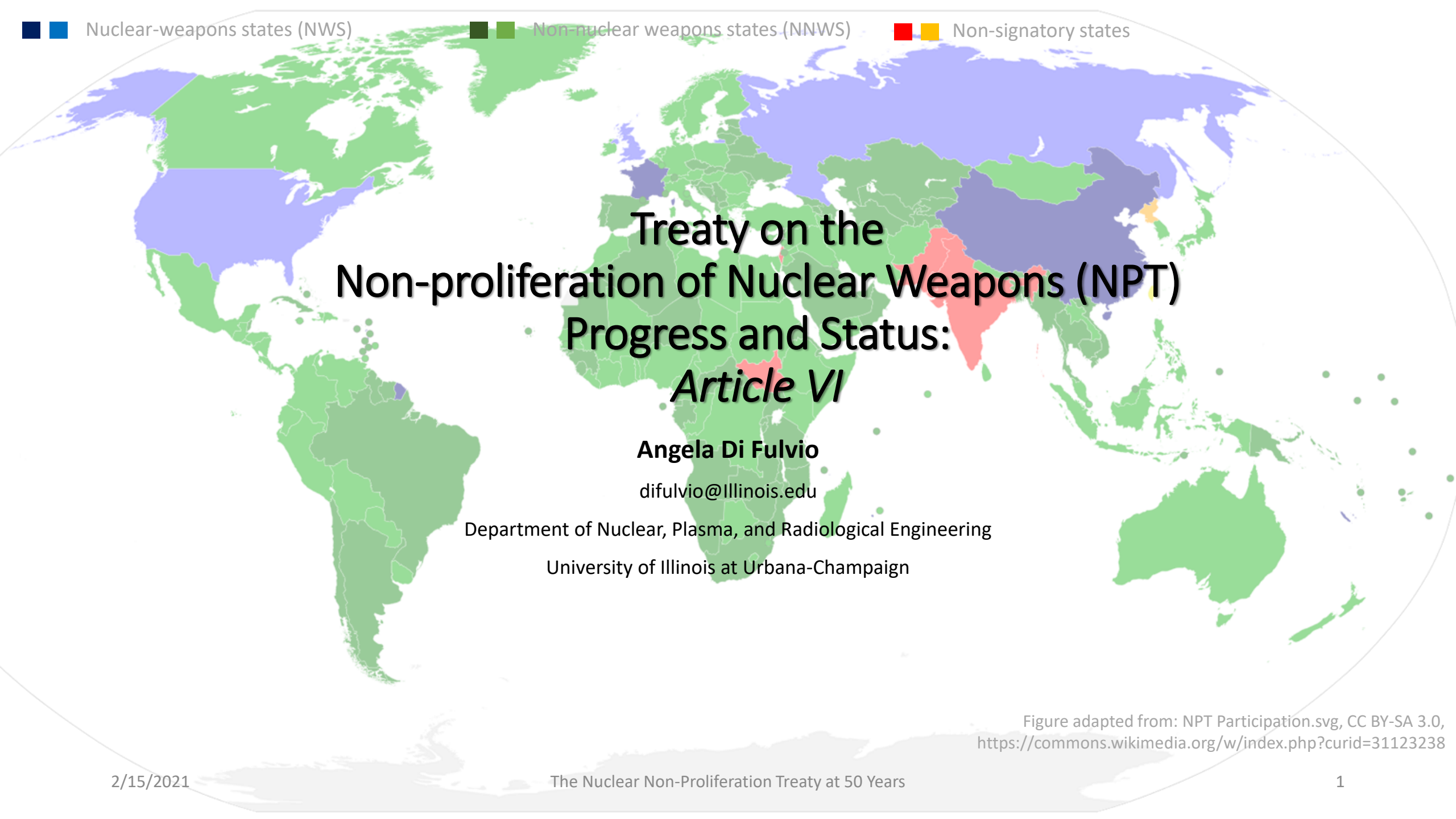


■ ■ Nuclear-weapons states (NWS) ■ ■ Non-nuclear weapons states (NNWS) ■ ■ Non-signatory states



Treaty on the Non-proliferation of Nuclear Weapons (NPT) Progress and Status: *Article VI*

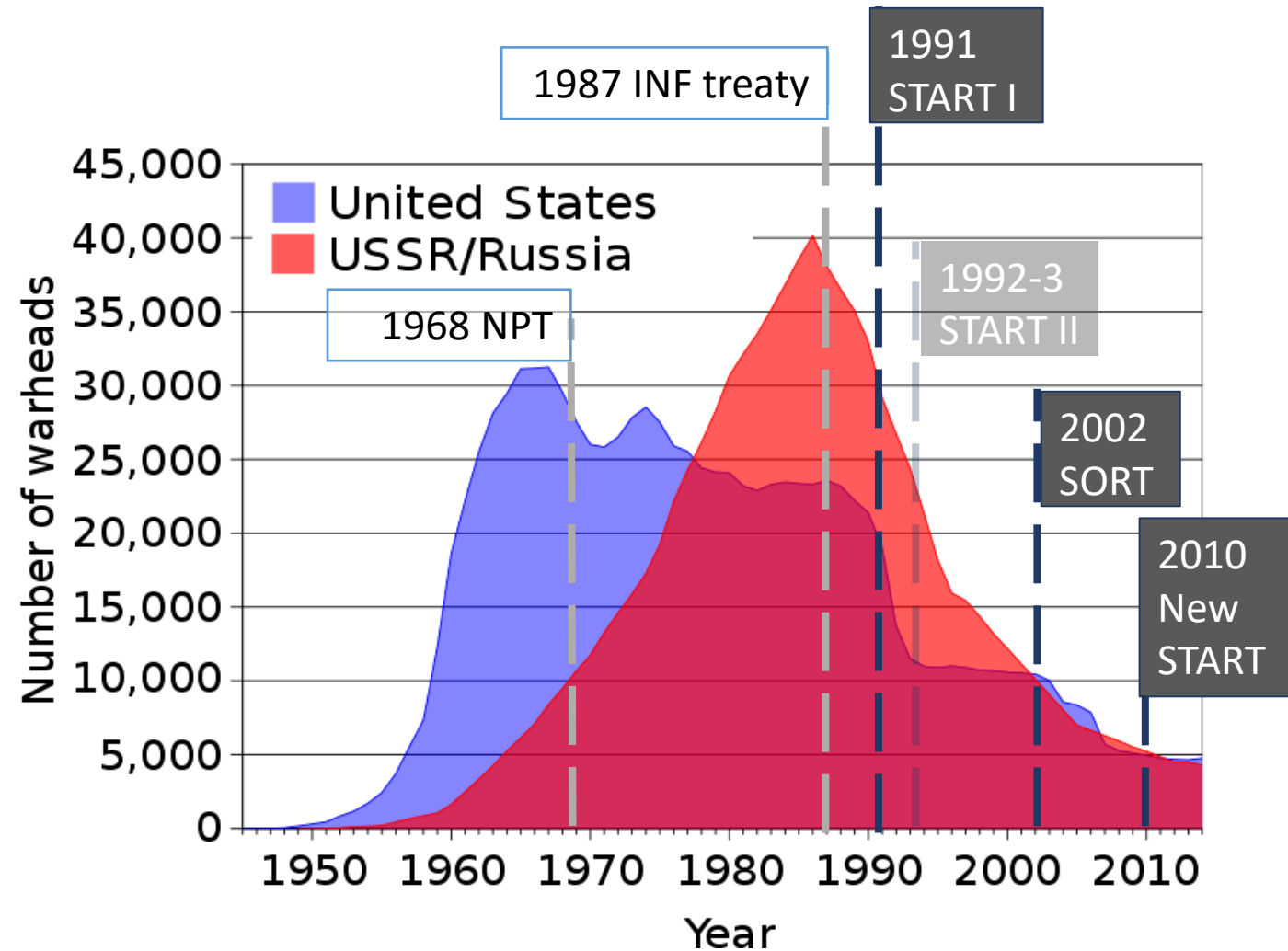
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Figure adapted from: NPT Participation.svg, CC BY-SA 3.0,
<https://commons.wikimedia.org/w/index.php?curid=31123238>

50 years of direct and indirect effects of the NPT on nuclear disarmament

- The extended deterrence was an incentive for many countries to join the NPT and effectively strengthened nonproliferation.
- Averted nuclear arms race in Latin America in the 1980s.
- South Africa dismantled its weapons before joining the NPT in 1991.
- Kazakhstan, Belarus, and Ukraine transferred all their nuclear weapons to Russia and joined the NPT as NNWS by 1994.
- US and USSR/Russian Federation removed hundreds of tons of nuclear materials from stockpiles.
 - “Megatons to Megawatts” – until 2013
- Strategic Arms Reduction Treaty (START) I and New START Treaty



START II never entered into force.

Figure adapted from: Robert S. Norris and Hans M. Kristensen, "Global nuclear stockpiles, 1945-2006," *Bulletin of the Atomic Scientists* 62, no. 4

The NPT as a framework for arms control measures

Article VI

ARTICLE VI

Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.

Disarmament Progress Within NPT

- Review Conferences (RevCon) held every five years.
- 1995 indefinite extension of the NPT, with agreed “principles and objectives” and “program of action” on disarmament
 - including Comprehensive Nuclear-Test-Ban Treaty, fissile materials treaty, and “determined pursuit” by nuclear-weapon states of “systematic and progressive efforts” to reduce nuclear arsenals.
- Middle Eastern “zone free of nuclear weapons”.

Slow and Uneven Progress

2000 [Clinton Administration] RevCon.

The parties agreed on 13 “practical steps”, including:

- Comprehensive Nuclear Test Ban Treaty
- Nuclear Test Moratorium
- Fissile Material Cutoff Treaty
- START II, START III, and Anti-Ballistic Missile Treaties
- Nuclear Disarmament Discussions
- Elimination of Nuclear Arsenals
- Verification

Figure adapted from: <http://www.geo-ref.net/en/t-nac.htm>

NPT in 21st Century

- 2005 [G. W. Bush Administration] RevCon - Parties did not reach consensus on a final document.
- 2010 [Obama Administration] RevCon - Agreed 64 Actions
 - Rapidly moving towards an overall reduction in the global stockpile of all types of nuclear weapons;
 - Address the question of all nuclear weapons regardless of their type or their location as an integral part of the general nuclear disarmament process;
 - To further diminish the role and significance of nuclear weapons in all military and security concepts, doctrines and policies.
- 2015 RevCon - Parties did not reach consensus on a final document.

Modernization efforts/new capabilities - NWS

US - new capabilities from the 2018 Nuclear Posture Review

- Low-yield version of the W-76 warhead for the Trident D5 SLBM (deployed in 2020) and a sea-launched cruise missile.
- Modernization of delivery vehicles: Minuteman III, SSBNs, B-52 and B-2 bombers to be replaced by 2030 (\$1.2 trillion, about 30% for the new delivery vehicles)

Russia

- Replace all the old ICBMs and SLBMs by 2025
- Sarmat heavy ICBM hosting up to 24 warheads
- Hypersonic glide delivery vehicle
- Intercontinental nuclear-powered high-speed torpedoes and hypersonic cruise missiles

China - new delivery systems, e.g., strategic stealth bomber, the Xian H-20.

France - next generation SSBN, and SLBM, and air-launched cruise missile

UK - replacement of its Trident SLBM force

The role of Nuclear Weapons in international politics is not decreasing but growing and the “systematic and progressive efforts” to reduce nuclear arsenals have slowed down in the last decade

The Future of Disarmament under the NPT

- Are NWS and NNWS going to resume a productive dialogue around Article VI within the NPT framework?
- Are further bilateral treaties (or agreements) a viable path towards reducing the size of nuclear arsenals?
- Is a unilateral approach foreseeable?
- Are there other steps that can be taken to reduce the nuclear threat?