

# PHYSICS COLLOQUIUM:

Dismantling the Nuclear Doomsday Machine: Scientists, the Bomb, and the Challenges of Nuclear Disarmament

#### Zia Mian

Physicist & CoDirector of the Program on Science & Global Security Princeton University

## **About The Speaker:**

Zia Mian is a physicist and co-director of Princeton University's the Program on Science and Global Security, co-chair of the International Panel on Fissile Materials, co-editor of the journal Science & Global Security, and an expert on the policy and technical aspects of nuclear arms. Recently, he was appointed to the U.N. Secretary-General's Advisory Board on Disarmament Matters. He is co-author of "Unmaking the Bomb: A Fissile Material Approach to Nuclear Disarmament and Nonproliferation (MIT Press). He received the Linus Pauling Legacy Award for "his accomplishments as a scientist and as a peace activist in contributing to the global effort for nuclear disarmament and for a more peaceful world," and the American Physical Society's 2019 Leo Szilard Award "for promoting global peace and nuclear disarmament." He is a Board Member of the Arms Control Association and serves on the Steering Committee of the Physicists Coalition for Nuclear Threat Reduction.

#### Abstract:

Eighty years ago physicists first worked out what it would take to build a simple nuclear weapon and the immediate effects of its use. Five years later, theory and experiment became devastating facts as the United States built, tested, and then used the first nuclear weapons to destroy cities. Today, there are nine nuclear armed states and over 13,000 nuclear weapons in the world. The nuclear-armed states are developing or modernizing their arsenals, easing constraints on when these weapons might be used, and pursue policies that risk accidental nuclear war. The hard-won international arrangements intended to halt, reverse and eventually eliminate nuclear weapons programs are unraveling. One potentially hopeful development, the 2017 United Nations Treaty on the Prohibition of Nuclear Weapons, has elicited opposition rather than support from these states. This talk will look at what role scientists have played in the past and can play today in helping address the challenge of reducing and eliminating the threat from nuclear weapons in the United States and globally, it also will introduce the new Physicists Coalition for Nuclear Threat Reduction.

<u>Date:</u> 1/28/2022

<u>Time:</u> 10:30 AM - 11:50 AM

## <u>Link:</u>

Please contact snsgradstaff@ucmerced.edu for the Zoom information.