Physics AP

Professors Bernstein, Kemp, and Narang

"Reducing the Danger of Nuclear Weapons and Proliferation"

This course will start with nuclear developments in India and Pakistan, one of the most likely flash points for conflict between nuclear powers. It will discuss the capabilities, doctrines, and trajectories of both states and their impact on crisis stability in the subcontinent. The second topic will deal with Uranium enrichment, a key step in the production of fuel for peaceful nuclear-power reactors which also can also be used to make nuclear weapons. As nuclear power spreads, an increasing number of countries will have the capability and motivation to build nuclear-weapon capable infrastructure. This talk explores this changing landscape and the implications for international security. The final talk will present a discussion of the dangers of the current US, Russian rapid response nuclear weapons policy, an evaluation of the Iran and North Korean nuclear proliferation situations, the upcoming May 2015 nuclear proliferation treaty (NPT) negotiations at the UN, and the outlook for nuclear weapons reductions.

1) Vipin Narang: Thurs. Jan. 22 - Nuclear Weapons Policies and Dangers in India and Pakistan

- 2) Scott Kemp: Mon. Jan. 26 Uranium Enrichment and Proliferation
- 3) Aron Bernstein: Wed. Jan. 28- Outlook- Nuclear Weapons and Non-Proliferation

All session 3 to 4:30 PM in the Kolker Room 26-414. For inquiries contact A.M. Bernstein, bernstein@mit.edu