



Old Dominion University

Department of Physics

Colloquium

Tuesday, February 23, 2016

" The Art of Insight: Street-fighting tools for better teaching and thinking"

**Sanjoy Mahajan's
Olin College and MIT**

With traditional science and mathematics teaching, students struggle with fundamental concepts. For example, they cannot reason with graphs and have no feel for physical magnitudes. Their instincts remain Aristotelian: In their gut, they believe that force is proportional to velocity. With such handicaps in intuition and reasoning, students can learn only by rote. I'll describe these difficulties using mathematical and physical examples, and illustrate how street-fighting mathematics and science---the art of insight and approximation---can improve our thinking and teaching, the better to handle the complexity of the world.

Presentation: **OCNPS 200 @ 3:00 pm**
Refreshments: **OCNPS Atrium @ 2:30 pm**

All interested persons are cordially invited to attend.