Students, Faculty and Staff please join us for the next Big Ideas Exchange as described below:

**A Big Ideas Special Event; NEW DIRECTIONS FOR DEFENSE**

**Date: 2 Dec 2016 time: 1500-1700 location: IN-122**

The Big Ideas Exchange (BIX) is an NPS initiative that brings forward new and potentially game-changing thinking developed by NPS faculty and students to address grand challenges in American national security. These fresh approaches can become the lifeblood of future innovations in military and naval organization, doctrine, and strategy. They reflect and augment larger changes emerging in the world from recent technological advances. The agenda below is just a sampling of a much larger set of big ideas being pursued by our faculty and students, which will be presented in future BIXs:

**The Big Idea About Big Ideas**  
John Arquilla, Chair, Defense Analysis  
What makes an idea big, and why big ideas matter.

**The Next Big Bang**  
Joseph Hooper, Associate Professor, Physics  
A burning aluminum cube releases much more energy than a detonating TNT cube. What if we could force aluminum to burn very rapidly? Next generation weapons may pack a bigger bang in a smaller package by clever use of metal combustion.

**The New Ethics of War**  
Bradley J. Strawser, Assistant Professor, Defense Analysis  
New distinctions between combatants and non-combatants and precision-guided munitions raise new questions in the ethical conduct of war.

INTERMISSION

**Innovation Leadership is a Craft**  
Peter Denning, Distinguished Professor and Chair of Computer Science  
Col. Todd Lyons, Senior Marine Representative  
The need for military innovators has never been greater but the emphasis on accelerating the invention of novel technologies is not accelerating the pace of innovation. What if innovation is not invention but the adoption of new practice? And we could teach all military service people how to navigate the chasm between invention and adopted practice?

Followed by general discussion with Dr. John Arquilla, facilitator.