

## 2013 Trident Scholar Presentations

Rickover Hall, Room 103

### Thursday AM, 25 April 2013

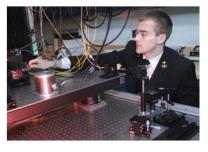
0845



0800
MIDN 1/C Mitchell R. Graves
An Algorithm to Identify and Localize
Suitable Dock Locations from 3-D
LiDAR Scans



0930
MIDN 1/C Andrew J. Rydalch
Turbulent Boundary Layer Flow over
Superhydrophobic Surfaces



MIDN 1/C Zachary M. Patrick
Pointing and Jitter Control for the
USNA Multiple-Beam Combining
System Using H-Infinity Adaptive
Control with Video Sensor Feedback



1015
MIDN 1/C Matthew P. Christian
Numerical Model for Predicting and
Managing Heat Dissipation from a
Neural Probe



### 2013 Trident Scholar Presentations

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#### Thursday PM, 25 April 2013

1345



1300
Midn 1/C Max C. Van Benthem
Tow Tank Measurements of
Hydrodynamic Performance of a
Horizontal Axis Tidal Turbine Under
Unsteady Flow Conditions



1430
MIDN 1/C Peter A. Roemer
Stochastic Modeling of the Persistence
of HIV: Early Population Dynamics



MIDN 1/C Jennifer L. Jones
An Evaluation of the Corrosion and
Mechanical Performance of
Interstitially Surface Hardened
Stainless Steel



1515
MIDN 1/C Caitlin M. Fine
Structural Changes and Convective
Processes in Tropical Cyclones as
Seen in Infrared and Water Vapor
Satellite Data



# 2013 Trident Scholar Presentations

Rickover Hall, Room 103

#### Friday, 26 April 2013



0800
MIDN 1/C Kyle A. Elam
Isolation of Thermal and Strain
Responses in Composites using
Embedded Fiber Bragg Grating
Temperature Sensors



MIDN 1/C Andrew C.
Tresansky
Numerical Modeling of High Irradiance
Electromagnetic Beam Effects on
Composite and Polymer Materials

0930



0845
MIDN 1/C Nicholas R. LaSalle
Study of Passive Flow Control
for Ship Air Wakes



1015
MIDN 1/C Phoebe M. Kotlikoff
Estimating the Effects of Pre-College
Education on College Performance



1100 MIDN 1/C Christopher D. Galvin Effect of Unsteady Wakes on Turbine Tip Gap Leakage



The U.S. Naval Academy instituted the Trident Scholar Program in 1963 to provide an opportunity for exceptionally capable midshipmen to engage in independent study and research during their senior year. Over its 50-year history, 488 midshipmen have participated in the program contributing their talents, creativity, and enthusiasm to a challenging project. Please join us at these presentations to acknowledge the efforts and celebrate the contributions of this year's Trident Scholars.



The Trident Scholar Program is generously supported by the Office of Naval Research.