



*Cordially invites you to our  
Monthly Dinner and Lecture*

# **SE Consideration in the Design of Autonomous Air, Ground, Surface and Undersea Vehicles**

**David Scheidt, Principal Professional Staff JHU/APL**

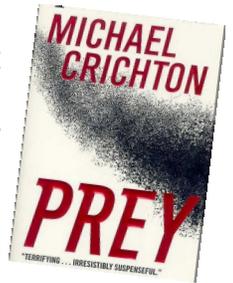
**Wednesday, 18 February 2015**

6:00 pm–8:00 pm

**Presentation:** Air, ground, surface and undersea vehicles are currently being used in the home, to support business operations, for space exploration and by most of the world's militaries. The next generation of unmanned vehicles will be autonomous, with vehicles interpreting and responding to the complex world in which they operate in real time. This talk discusses autonomous unmanned vehicle teams that are capable of operating with, or without, real-time human supervision. The benefits of unmanned vehicle autonomy, methods for optimizing team structure and optimizing the relationship between autonomous unmanned vehicles and humans will be discussed as will hardware in-the-loop experiments involving autonomous air, ground, surface and undersea vehicles.



**Speaker:** David Scheidt is Principal Professional Staff at Johns Hopkins University's Applied Physics Laboratory where he conducts research on distributed intelligent control systems. Mr. Scheidt currently leads research efforts in autonomous unmanned air, ground, surface and undersea vehicles as well as intelligent fault management research for space and terrestrial systems. Mr. Scheidt has twice won the National Performance Review's "Hammer" award for excellence in government contracting, has published over 50 peer reviewed papers, is on the Defense Science Board and co-chairs the IEEE International Symposium on Resilient Control Systems.



**Door Prize**

**Delicious friendly networking buffet dinner at 6 pm:** Spinach and Parmesan Crusted Tilapia  
Rice Pilaf and sautéed green beans, salad, rolls, dessert, beverages, etc.

**Dinner Cost:** Guests: **\$25**; INCOSE and IEEE members: **\$20** if payment is received by February 14, 2015, **\$25** afterward. To pay by credit card or PayPal, visit our registration webpage for details: <http://www.incose-cc.org/registration/>.

**Lecture ONLY free at 7pm:** Parsons Auditorium or live via the web at <http://www.incose-cc.org/> or search for INCOSE.CHEESAPEAKE on YouTube.

## **Location:**

Johns Hopkins University  
Applied Physics Laboratory  
11100 Johns Hopkins Road  
Building 1, Parsons Auditorium  
Laurel, MD 20723

**Corporate Sponsor:** We wish to thank the Applied Physics Laboratory for supporting the systems engineering profession through use of their facilities.

# Directions

## JHU APL

Main Entrance—Building 1  
Parsons Auditorium  
11100 Johns Hopkins Road  
Laurel, Maryland 20723  
Phone (443) 778-5000

See APL's Visitor Guide for more information:

[www.jhuapl.edu/newscenter/visitor/default.asp](http://www.jhuapl.edu/newscenter/visitor/default.asp).

### **From Washington DC and Capital Beltway (I-495):**

Take I-95 North toward Baltimore 10 miles to the Columbia exit (MD Route 32 West),  
Go 2.5 miles to the Washington DC exit (US Route 29 South).  
Go 1.5 miles south and take the Johns Hopkins Road exit (bear right at the top of the hill).

### **Or from the Capital Beltway (I-495):**

Take US Route 29 North (Colesville Road) 10 miles and follow the signs for the turn onto Johns Hopkins Road.

### **From Baltimore and Baltimore Beltway (I-695):**

Take I-95 South toward Washington DC.  
Go 13 miles and take the Columbia exit (MD Route 32 West).  
Go 2.5 miles and take the Washington DC exit (US Route 29 South).  
Go 1.5 miles south and take the Johns Hopkins Road exit (bear right at the top of the hill).

### **Once you're on Johns Hopkins Road:**

APL is a half-mile west of US Route 29 on your right side. Go past the first entrance, continuing past the pond, and take the next right turn onto a tree-lined lane. Park in the visitor's lot on your left side. Enter at the main entrance marked Building 1 (flagpoles and traffic circle in front).

