

**JOINT DINNER MEETING
SNAME SD-5 PANEL AND
INTERNATIONAL HYDROFOIL SOCIETY**

**Thursday, 9 February 2017
Army Navy Country Club, Arlington, VA**

5:30 to 6:30 Cash Bar - 6:30 to 7:30 Dinner - 7:30 to 8:30 Program

**Salad, Marinated chicken paillard with saffron cous cous and broccolini
Deep dish apple pie, Coffee & tea**

Price: \$42 by 1:00 p.m. Friday 3 Feb.

\$45 after that, incl. walk-ins

Make reservations with:

Joel Billingsley joelbillingsley@earthlink.net or Allen Ford allenford@verizon.net

or, Reserve & pay online at <http://foils.org/meetings.htm>

Please honor reservations. No-shows may be asked to cover costs incurred.

High Speed Planing Craft: the evolution of a species

**Prof. Stefano Brizzolara, PhD
Virginia Tech, Blacksburg, VA**



Dr. Brizzolara calls planing hulls "the emblematic category of high speed marine craft." He will start by reviewing the most significant planing hull designs of the past and their famous designers, in Europe and the USA, such as Renato Levi, Peter du Caine, Pietro Baglietto, Eugene Clement, Donald Blount, Ray Hunt; and their builders such as Riva, Pershing, FB Design, Wally and Overmarine. He will explain their hydrodynamics and how they have integrated hull and propulsion, touch on aspects of styling, especially for yachts, and show that few important innovations have come in recent decades. He will then present new ideas and concepts that appear to offer dramatic performance improvement. One of those, the Stepped Cambered Planing Hull with Hydrofoils (SCPH2), has shown drag reduction of more than 30 percent in model scale tests, compared with present designs.

Stefano Brizzolara is Associate Professor in ocean vehicle dynamics in the Aerospace and Ocean Engineering Department at Virginia Tech, as well as a research scientist at MIT, where he founded the Innovative Ship Design Lab, iShip. As a Naval Architect and Marine Engineer with a PhD in numerical hydrodynamics for ship design, he gained a solid high tech ship design experience in the Navy Shipbuilding Division of Fincantieri, in Genoa, Italy. He developed numerical methods for high-efficiency low-noise propeller design and unconventional high-speed hull form design and optimization that have led to several innovative hull form and marine propulsor technologies. He is the author of more than 150 scientific papers and inventor of six patents (two pending).