

## **Grzegorz Piotr Filip**

**Assistant Research Scientist, Naval Architecture & Marine Engineering  
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### **Education**

Ph.D. Naval Architecture and Marine Engineering, University of Michigan, 2013  
M.S.E. Energy Systems Engineering, University of Michigan, 2012  
M.S.E. Naval Architecture and Marine Engineering, University of Michigan, 2010  
B.S.E. Naval Architecture and Marine Engineering, University of Michigan, 2009

### **Positions Held**

Assistant Research Scientist, September 2016 – present  
Research Investigator, November 2013 – August 2016  
Graduate Student Instructor, September 2009 – May 2010

### **Professional Activities and Awards**

National Defense Science and Engineering Graduate Fellowship, 2010  
Graduated Cum Laude, University of Michigan, 2009  
James B. Angell Scholar, 2009  
University of Michigan College of Engineering Dean's List, 2007-2008  
University of Michigan Honors, 2007-2008  
SNAME associate member, 2006 – present

### **Recent Publications**

Grzegorz P. Filip, Wenzhe Xu, and Kevin J. Maki (2016), "URANS Predictions of Added Resistance and Motions of the KCS in Head Waves", Departmental Report No. 355, The University of Michigan, Department of Naval Architecture and Marine Engineering.

Simo A. Makiharju, In-Ho R. Lee, Grzegorz P. Filip, Kevin J. Maki, Steven L. Ceccio (2016), "The Topology of Gas Jets Injected Beneath a Surface and Subject to Liquid Cross-Flow", *Journal of Fluid Mechanics*, 818, 141-183.

Grzegorz P. Filip and Kevin J. Maki (2015), "High-resolution simulation of wave breaking on a vertical circular cylinder", *27th International Conference on Parallel Computational Fluid Dynamics*, Montreal, Canada.

Grzegorz P. Filip and Kevin J. Maki (2015), “Seakeeping analysis of the KCS vessel in regular waves”, *CFD Workshop in Ship Hydrodynamics*, Tokyo, Japan.

Grzegorz Filip and Kevin Maki (2015), “Evaluation of Advanced Turbulence Models for High-Reynolds Number External Flow”, Departmental Report No. 354, The University of Michigan, Department of Naval Architecture and Marine Engineering.

Grzegorz P. Filip, Dae-Hyun Kim, Sunil Sahu, Jan de Kat, and Kevin J. Maki (2014), “Bulbous Bow Retrofit of a Container Ship Using an Open-Source Computational Fluid Dynamics (CFD) Toolbox”, *Transactions of the Society of Naval Architects and Marine Engineers*, vol 122.

Grzegorz P. Filip, Kevin J. Maki and Sung-Eun Kim (2012) “ Critical evaluation of several LES and DES models for simulation of flow around a vertical surface-piercing cylinder” *Numerical Towing Tank Symposium NuTTS 2012*, Cortona, Italy.

Grzegorz P. Filip, Sung-Eun Kim, and Kevin J. Maki (2012) “Critical evaluation of several LES and DES models for simulation of flow around the DARPA SUBOFF geometry”. *24th International Conference on Parallel Computational Fluid Dynamics 2012*, Atlanta, GA, May.

Bruce J. Martin, Grzegorz P. Filip, Kevin J. Maki, Robert F. Beck, and Eric Hall (2011), “The Effects of Streamlined Rigging on Sailboat Performance”, *20th Chesapeake Sailing Yacht Symposium*, Annapolis, Maryland, USA, March.