# Douglas Keller Jr.

# **Education**

# Ph.D. Ingénierie, Mécanique et Énergétique

Institut Polytechnique de Paris, École Polytechnique Laboratoire de Météorologie Dynamique Impact of the spatial and temporal variability time of the Mistral on dense water formation in the Mediterranean Sea

# M.Sc. Mechanical Engineering

College of Engineering and Mines, University of Alaska Fairbanks Comparison of Resistance-Based Strain Gauges and Fiber Bragg Gratings in the Presence of Electromagnetic Interference Emitted from an Electric Motor

#### **B.Sc.** Mechanical Engineering

 $\hbox{College of Engineering and Mines, University of Alaska Fairbanks \ \textbf{FOSS Load Cell Design and Development} \\$ 

# **Publications**

D. Keller, D. R. Eagan, G. J. Fochesatto, R. Peterson, H. M. Chan, A. Parker, (2019) *Advantages of Fiber Bragg Gratings for Measuring Electric Motor Loadings in Aerospace Application*, Review of Scientific Instruments

# **Experience**

#### **PhD Thesis**

Determining the influence of the Mistral wind on deep convection in the northwest Mediterranean Sea (Gulf of Lion).

# **Arctic and Subarctic Superior Mirages**

Determined the occurrence and variability of superior mirages in the arctic and subarctic regions with GPS radio occultation.

#### M.Sc. Thesis

Determined the effect of electromagnetic interference from electric motors on load sensing strain gauges utilizing fiber Bragg gratings.

#### **NASA Engineering Intern**

Tested the heat transfer capabilities of the Fiber Optic Sensing System housing for use on the X-59 X-plane.

#### References

### Philippe Drobinski PhD

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