

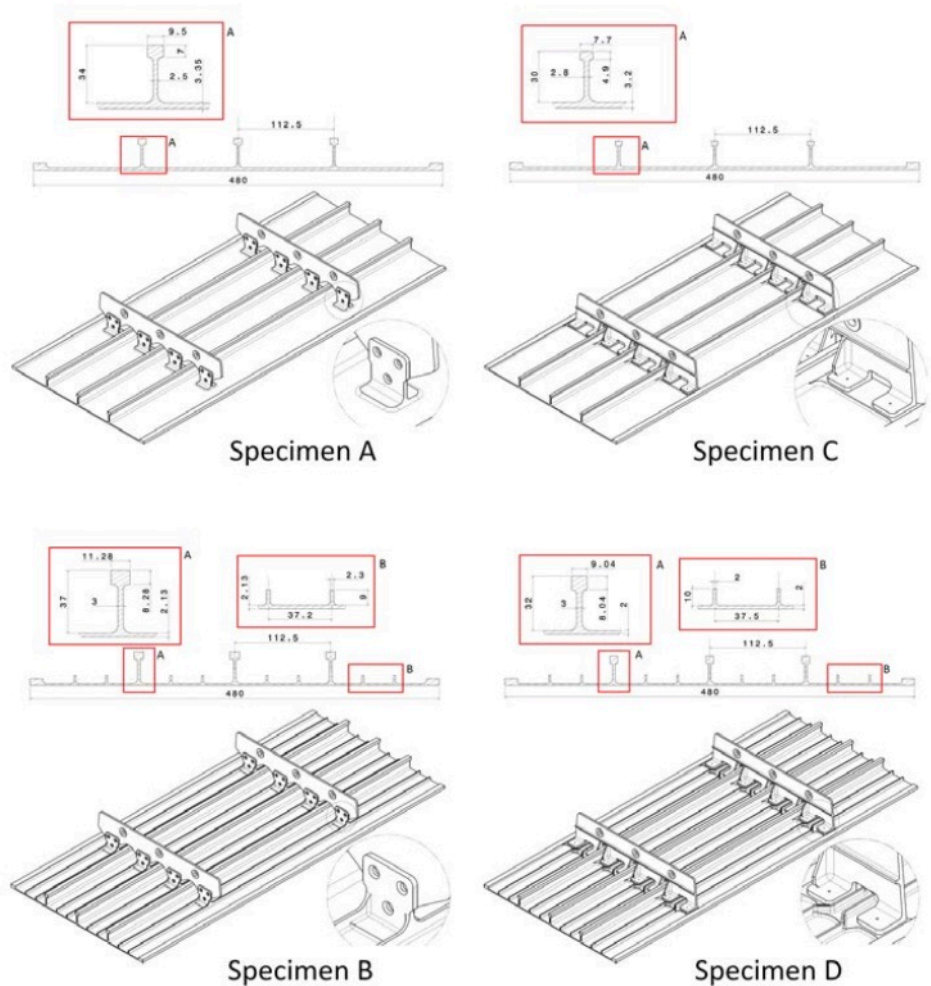


**Professor Damian Quinn**

See:  
<https://scholar.google.com/citations?user=WbY7sWoAAAAJ&hl=en>  
[https://www.researchgate.net/profile/D\\_Quinn3/publications](https://www.researchgate.net/profile/D_Quinn3/publications)  
[http://pure.qub.ac.uk/portal/en/persons/damian-quinn\(8f837bc0-327b-43a1-99a8-1f8fa1b690e3\).html](http://pure.qub.ac.uk/portal/en/persons/damian-quinn(8f837bc0-327b-43a1-99a8-1f8fa1b690e3).html)  
[http://pure.qub.ac.uk/portal/en/persons/damian-quinn\(8f837bc0-327b-43a1-99a8-1f8fa1b690e3\)/publications.html](http://pure.qub.ac.uk/portal/en/persons/damian-quinn(8f837bc0-327b-43a1-99a8-1f8fa1b690e3)/publications.html)  
[http://pure.qub.ac.uk/portal/en/persons/damian-quinn\(8f837bc0-327b-43a1-99a8-1f8fa1b690e3\)/journals.html](http://pure.qub.ac.uk/portal/en/persons/damian-quinn(8f837bc0-327b-43a1-99a8-1f8fa1b690e3)/journals.html)  
[http://pure.qub.ac.uk/portal/en/persons/damian-quinn\(8f837bc0-327b-43a1-99a8-1f8fa1b690e3\)/activities.html](http://pure.qub.ac.uk/portal/en/persons/damian-quinn(8f837bc0-327b-43a1-99a8-1f8fa1b690e3)/activities.html)

School of Mechanical and Aerospace Engineering  
Queen's University Belfast

**Capsule Biography:**



**Fig. 1 Conventional and BCF wing cover panel specimens.**

From: G. Houston, D. Quinn, A. Murphy and F. Bron, "Wing Panel Design with Novel Skin-Buckling Containment Features", Journal of Aircraft, Vol. 53, No. 2 (2016), pp. 416-426

Dr Damian Quinn graduated from Queen's University Belfast (QUB) in 2005 with an RaeS accredited Master's degree (First Class Honours) in Aeronautical Engineering. This was followed in 2010 by the completion of a PhD entitled "Panel Skin Sub-stiffening Concepts for Improved Structural Performance" from the School of Mechanical and Aerospace Engineering (QUB). Prior to joining the staff of QUB as a lecturer in Aircraft Structures in 2012, he undertook two industrially based Post-Doctoral research positions focusing on the analysis and design of aircraft structural components with Bombardier Aerospace and Constellium CRV (previously ALCAN CRV)

### **Research Interests:**

Dr Damian Quinn's research interests include the structural analysis and design of thin-walled structures, with a strong focus on aerospace applications. His research targets both metallic applications (analysis and optimized design considering advanced alloys, novel geometric design and new manufacturing methods) and composite applications (impact modeling, structural analysis and integrated design for manufacture). He has a keen interest in pursuing experimentally based research including material characterization, structural detail testing and higher TRL sub-component testing. His numerical research interests are centered on the finite element modeling of thin-walled structural components across multiple scales, including the sizing of large-scale aerospace components. A major element of his numerical research is FEM modeling automation and the interfacing of various design and analysis tools across multiple software platforms.

### **Selected Publications:**

- A. Murphy, W. McCune, D. Quinn, M. Price. The characterization of friction stir welding process effects on stiffened panel buckling performance. *Thin-Walled Structures*, 45:339-351, 2007.
- D. Quinn, A. Murphy, W. McEwan and F. Lemaitre, "Stiffened panel stability behaviour and performance gains with plate prismatic sub-stiffening", *Thin-Walled Structures*, Vol. 47, No. 12, December 2009, pp. 1457-1468, doi:10.1016/j.tws.2009.07.004
- D. Quinn, A. Murphy, W. McEwan and F. Lemaitre, "Non-prismatic sub-stiffening for stiffened panel plates—Stability behaviour and performance gains", *Thin-Walled Structures*, Vol. 48, No. 6, June 2010, pp. 401-413, doi:10.1016/j.tws.2010.01.010
- D. Quinn, A. Murphy and C. Glazebrook, "Aerospace stiffened panel initial sizing with novel skin sub-stiffening features", *International Journal of Structural Stability and Dynamics*, Vol. 12, No. 5, October 2012, DOI: 10.1142/S0219455412500605
- Talha Ekmekyapar, A. Murphy, D. Quinn and Mustafa Ozakca, "Impact of finite element idealization on the prediction of welded fuselage stiffened panel buckling", *Proceedings of the Institution of Mechanical Engineers, Part G, Journal of Aerospace Engineering*, Vol. 230, No. 2, June 2015, DOI: 10.1177/0954410015591044
- G. Houston, D. Quinn, A. Murphy and F. Bron, "Wing Panel Design with Novel Skin-Buckling Containment Features", *Journal of Aircraft*, Vol. 53, No. 2 (2016), pp. 416-426. <http://dx.doi.org/10.2514/1.C033540>